

Environment, Safety and Health

Executive Budget Summary

Mission

The Office of Environment, Safety and Health (EH) is committed to protection of Department of Energy (DOE) workers, the public, and the environment. This commitment is demonstrated by continuous improvement in program and policy development; independent oversight of the status of environment, safety, health, and safeguards and security programs; and sharing of technical resources, assistance and information. EH applies its resources to DOE activities in order to prevent accidents or injuries to workers and the public, and harm to the environment. EH is the Department's major source of expertise in disciplines such as environmental protection, nuclear safety engineering, public health, industrial hygiene, radiation protection, construction safety, epidemiology, and occupational medicine. The EH goal is to leverage resources and skilled personnel to efficiently provide DOE's line management programs with the tools and independent program assessments required to preserve safety and to effectively protect national security interests at DOE sites. Open communication, participation, and performance feedback on EH activities are integral to EH's success.

The Environment, Safety and Health program is funded in three appropriations: (1) Energy Supply, (2) Other Defense Activities, and (3) Defense Environmental Restoration and Waste Management. The Energy Supply EH program consists of: Technical Assistance, National Environmental Policy Act (NEPA), Management and Administration, and a Program Direction decision unit which includes the EH Working Capital Fund. The Other Defense Activities EH program includes: Oversight, Domestic and International Health Studies programs, Radiation Effects Research Foundation (RERF) program, and a Program Direction decision unit. In addition, the Defense Environmental Restoration and Waste Management appropriation supports an additional increment of health studies at sites where the Department's Environmental Management program conducts cleanup.

DOE has transitioned to new missions which include weapons dismantlement, environmental cleanup, and facility decontamination and decommissioning. Residual hazards at DOE facilities, especially in the nuclear weapons complex, are the result of more than 50 years of nuclear materials production and processing under less than optimum conditions, the impacts of which are still being characterized. DOE harbors the largest inventory of hazardous nuclear materials in the world outside of the former Soviet Union, as well as large quantities of hazardous chemicals. Due in large part to the sudden end of the Cold War, and the resultant rapid shutdown of the production and processing facilities, much of this material (including plutonium, spent nuclear fuel, highly enriched uranium, radioactive waste, radioactive isotopes, and hazardous chemicals) is stored in aging and deteriorating facilities, and under conditions that are in themselves hazardous. There is still a lack of reliable data for many of these facilities on the most basic safety issues, such as non-compliant electrical and ventilation systems. In addition to these challenges, the problem of secure storage of special nuclear material and classified information remains.

The EH mission is one of DOE's highest priorities. EH technical experts work with line program managers to develop tools needed to manage environment, health, and safety at DOE facilities more effectively and at less cost to taxpayers. EH has demonstrated that the Department can do its work better, more safely, and at less cost by integrating environment, health, and safety into the planning and

execution of work. EH will continue to work with its partners in the field to ensure that safety is no longer viewed as an "add-on" that produces only paper and needless cost, but as an asset that allows efficient targeting of the most urgent risks, most efficient use of limited resources, and effective accomplishment of work.

The need for effective programs to identify environment, safety, and health concerns at the project and individual activity level remains critical. Emphasis has been placed on assuring that prior commitments to fund programs to reduce environment, safety, and health concerns are met represent important accomplishments, but more remains to be done. The downsizing and realignment of the weapons production efforts will necessitate changes in the conduct of operations. In addition, the limitations on funding Environmental Management work as needs increase will create conflicts between meeting details of compliance agreements negotiated in earlier years and organizing efforts to pursue an integrated approach to risk reduction. EH's analytical products are shared DOE-wide to assist the sites in appropriate and timely resolution of identified and emerging environment, safety, and health concerns.

Mission Supporting Goals and Objectives

The EH overall major goals and objectives are as follows:

- Provide a standardized corporate independent oversight process to appraise the effectiveness of environment, safety, health and safeguards and security programs throughout DOE. To accomplish the goal of corporate independent oversight, the following objectives have been established: (1) identify, prioritize, and target Departmental needs for independent oversight; (2) incorporate DOE's guiding integrated safety management policy and principles into all oversight activities; (3) sustain a coordinated and consistent independent oversight for DOE; (4) administer an enforcement program that appropriately penalizes significant violations of nuclear safety requirements; and (5) disseminate lessons learned to reinforce good practices.
- Provide quality, timely, efficient, and effective corporate support and technical services. To accomplish this goal, the following objectives have been established: (1) provide Departmental environment, safety, and health crosscutting programs and technical services that are aligned with critical missions and integral to mission accomplishment; (2) evaluate operational performance data and identify for corporate assessment and action those vulnerabilities that pose urgent risks to DOE workers, the public, and mission accomplishment; (3) continue ongoing partnerships with private industry, government agencies, and national safety organizations to promote information exchange and program benchmarking to enhance DOE safety programs; and (4) improve corporate services through feedback and performance measures.
- Provide Departmental requirements, guidance, and policy for environment, safety and health program implementation and measurement. To accomplish this goal, the following objectives have been developed: (1) support ongoing field analysis, interpretation, and application of "WorkSmart" standards (safety guidelines) and provide needed regulatory interpretations and implementation guidance; (2) interface with outside regulators and provide comments on pending regulations pertinent to DOE and regulatory policies and actions having impact on DOE missions; (3) continue stewardship and improve effectiveness of the new environment, safety, and health orders; and (4) develop, issue, and implement technical standards for DOE activities based on appropriate consensus standards.

- Provide a National Environmental Policy Act (NEPA) process that fosters sound Departmental planning and decision-making and builds public trust through effective process implementation. To accomplish this goal, EH has established the following objectives: (1) ensure timely and adequate completion of NEPA reviews through technical assistance, independent policy review, and approval recommendations for major programmatic environmental impact statements (EISs), site-wide and other EISs, and related NEPA documents; (2) ensure the consistency and quality of NEPA documents and increase the efficiency of NEPA personnel by determining and responding to customer needs; (3) issue guidance on selected technical and policy topics; (4) conduct workshops for Headquarters and field personnel; and (5) participate in NEPA process improvement teams and other initiatives that foster continuing improvement in the NEPA process.
- Ensure environment, safety, and health performance and management accountability. To accomplish this goal, EH has established the following objectives: (1) develop and support implementation of DOE-wide environment, safety, and health budget and planning process that defines scope, identifies costs, prioritizes activities based on relative risk, and allocates resources based on established commitments in a visible manner for implementation of environment, safety, and health program activities; (2) improve environment, safety, and health performance through the application of total quality approaches to management processes; and (3) integrate environment, safety, and health in all Departmental business functions.
- Support realignment of contract terms and conditions to incorporate environment, safety, and health management systems development needed to move towards a corporate business performance mode. To accomplish this goal, EH has established the following objectives: (1) identify ways for line program management to improve environment, safety, and health performance as part of work execution systems; and (2) integrate environment, safety, and health in all Departmental business functions.
- Conduct EH's mission in an open, trustworthy and responsive manner. To accomplish this goal, EH's objectives are: (1) establish and implement programs that strengthen the public's trust, confidence, credibility and respect in and for EH; and (2) support the Department's efforts to reduce the volume of national security information and minimize future classification.
- Promote the health and safety of DOE's workers and communities surrounding Departmental sites and reduce radiation and hazardous exposure through understanding of radiation effects and other hazards on humans. To accomplish this goal, EH's objectives are: (1) assist the field in the identification and application of effective approaches to prevent injury and illness; and (2) support the development of domestic and international health effects information on populations exposed to releases of varying levels of ionizing radiation.

The legal requirements that affect the activities of the EH organization include all environmental, safety, and health Federal regulations, as well as legislation such as the Atomic Energy Act of 1954, as amended, and the National Defense Authorization Act for Fiscal Year 1995.

Strategy

The Office of Environment, Safety and Health's (EH) intent is to assure that quality, objectivity, responsiveness and innovation are hallmarks of all EH activities.

EH's commitment to ensure the safety and health of the DOE workforce and members of the public, and the protection of the environment in all Department activities is our strategic objective, part of our performance agreement with the President, and a key part of the DOE Strategic Plan. To accomplish this objective, EH integrates and embeds sound environment, safety, and health management practices into the performance of DOE's day-to-day work. EH ensures that environment, safety and health priorities are clearly identified and given appropriate consideration for funding. EH is working with the Nuclear Regulatory Commission (NRC) and the Occupational Safety and Health Administration (OSHA) to evaluate the costs and benefits of external regulation of DOE safety and health activities. Pilot programs are being conducted.

Another strategic objective is to continually work with the public community in an open, frank, and constructive manner as a good neighbor and public partner. To accomplish this objective, EH fosters strong partnerships with neighboring DOE communities, regulators, and other stakeholders to determine priorities and solutions. In addition, EH increases public awareness of DOE's mission by improving the quality, timeliness, frequency, and sufficiency of information disseminated on the Department's functions, successes, lessons learned and future activities. EH focuses on developing management-level analytical products, reducing redundancies, and enhancing staff development. EH serves its principal customers in the following major areas: (1) development of Departmental environment, safety, and health requirements, guidance and interpretations that are effective and efficient to guide program implementation; (2) improvement of environment, safety and health performance and management accountability by supporting the integration of environment, safety, and health considerations into the Department's business and budget planning processes; (3) provision of critical corporate environment, safety and health support and services, including regulatory and industry interface, technical assistance to improve program management and execution, and to assist in the efficient and effective implementation of requirements; and (4) conduct independent oversight activities that provide a comprehensive status of environment, safety, health, and safeguards and security performance at DOE facilities.

One of DOE's greatest challenge is performing new types of hazardous work safely and securely at facilities that were designed to meet the requirements of outdated rules and orders. Many old, poorly-maintained facilities do not meet current building codes and safety standards. WorkSmart standards provide a graded approach to developing safety standards that allow the Department to tailor the standards to the work and the facilities. Pilot applications of this process indicate that worker safety can be enhanced while program costs are reduced.

The EH independent oversight program has been extremely useful in helping the Department effectively identify and target unacceptable risk. Comprehensive environment, safety and health evaluations provide DOE management with validated, professional appraisals of the site's performance by identifying areas of greatest risk in terms of both immediate hazards and overall program management. The foundation of this approach is an assessment of management effectiveness based on DOE's integrated safety management policy and the guiding principles of safety management contained in that policy. These assessments supply DOE management with validated, professional appraisals of the site's performance. Using the guiding principles of safety management permits objective program analysis. Although much

effort remains, changes in the Department's ability to apply resources to areas of greatest need have already been observed, and will become increasingly evident in efficiency in addressing environment, safety, health, and safeguards and security issues.

The rapid transition of the Department to a business management model with its emphasis on gaining cost-efficiencies, privatization and innovative management structures in the field has brought concomitant changes in how EH functions. Special emphasis will be given to self-assessment and self-reporting by field elements as a source of performance information, coupled with increased emphasis on EH performance analysis. Likewise, increased priority will be given to help move DOE line management from outdated environment, safety and health management approaches and systems to programs that facilitate the exchange of innovative business or environment, safety and health management practices that are preventive and cost-efficient in nature. From a technical safety assistance perspective, special emphasis will be given to urgent programmatic needs such as safely managing the decommissioning and decontamination of aging DOE facilities and hazardous waste.

EH will continue to build on its strong record of cutting costs without risking the safety and health of DOE workers, the quality of the environment, or the quality of the health studies program. Even as challenges have grown, the EH budget has been reduced by cutting administrative overhead costs and focusing on the highest priority needs. An EH staffing plan has identified the most critical functions and closely matched personnel to fit those needs. Functions of lower priority will continue to be eliminated. This will result in a cut in Federal personnel from 375 in FY 1998 to 355 in FY 1999 with 345 full-time-equivalents in FY 2000. EH has also analyzed how it utilizes support contractors and established specific criteria for their limited use. While EH has some unique national-level experts, technical contractual services continues to be more practical and cost-effective, providing a surge pool of technical expertise on an as needed basis. The evolving needs for national-level expertise in a multitude of disciplines can best be met through the use of contractors who can rapidly respond to the continually changing skill mix required of EH activities across the DOE complex.

The medical surveillance for the former workers program, required by the 1993 Defense Authorization Act, could potentially cost hundreds of millions of dollars. EH has worked during the past three years to develop a cost-effective approach that relies on feasibility studies to target populations most at risk. In FY 1996, EH awarded contracts to six consortia of universities, labor unions, and health specialists. In FY 1997, each of these consortia began conducting the feasibility assessment phases of their projects. In addition, EH issued a request for proposals for major sites not addressed as part of the first solicitation. In FY 1998, the medical surveillance phase of the first set of projects began, and the feasibility assessments for the four newly awarded cooperative agreements were initiated. In FY 1999, all ten projects will be in the implementation phase of their medical surveillance programs.

DOE, in partnership with the Department of Health and Human Services (HHS), has begun a process that will produce a strategy to include a public health agenda for each DOE site. Developed in coordination with HHS, this strategy will have clearly defined goals, objectives, and priorities for health activities to ensure that the issues of greatest concern to DOE workers and communities are addressed. All newly-funded health activities conducted by HHS will be consistent with the priorities established in this strategy.

In the Defense Environmental Restoration and Waste Management Appropriation, DOE supports public health studies in conducting a range of health-related activities. These activities are managed by EH and will be included in the public health agenda being developed in partnership with HHS.

Major Changes

The Department has consolidated the management of Health Studies in the Office of Environment, Safety and Health to provide a focal point for ensuring that the results of these efforts are used for the maximum benefit of DOE workers and communities.

The Department funds a large number and wide variety of epidemiologic and other health-related activities to address the potential effects of DOE operations on the health of DOE workers and communities. Through a Memorandum of Understanding with the Department of Health and Human Services (HHS), studies of worker and community health are funded through the Office of Environment, Safety and Health under the Other Defense Activities account, and are administered by the HHS/CDC. Prior to FY 1999, similar activities were separately funded by the Office of Environmental Management under the Defense Environmental Restoration and Waste Management Appropriation, and were independently conducted by HHS under its statutory authority under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Management of all HHS health studies (conducted by both CDC and ATSDR) was consolidated under EH in FY 1999.

The funding request for Public Health Activities in the Defense Environmental Restoration and Waste Management Appropriation for Fiscal Year 2000 is \$20,000,000. These studies have been transferred by the Congress for the Office of Environment, Safety and Health to manage. This request could include funding for the Hanford Medical Monitoring Program and the Iodine-131 Exposure Registry, should they be incorporated into the DOE/HHS public health agenda for Hanford and base Public Health program activities at DOE sites. Should the medical monitoring program or exposure registry not be included in the Hanford health agenda for FY 2000 or be modified from current proposals, the Department will submit an appropriate Reprogramming Request.

Funding Profile

(dollars in thousands)

	FY 1998 Current Appropriation	FY 1999 Original Appropriation	FY 1999 Adjustments	FY 1999 Current Appropriation	FY 2000 Request
Energy Supply					
Operating Expenses					
Technical Assistance	21,444	16,445	0	16,445	16,445
NEPA	3,000	2,552	0	2,552	2,500
Management and Administration	17,274	13,003	0	13,003	12,807
Program Direction	23,550	18,398	0	18,398	18,998
Subtotal, Energy Supply	65,268	50,398	0	50,398	50,750
Use of prior year balances	-1,897	0	-2,970	-2,970	0
Subtotal, Energy Supply	63,371	50,398	-2,970	47,428	50,750
Other Defense Activities					
Operating Expenses					
Oversight	14,015	11,700	0	11,700	12,775
RERF	14,000	14,000	0	14,000	13,500
Health Studies	45,985	41,031	0	41,031	40,956
Program Direction	20,000	24,769	0	24,769	24,769
Subtotal, Other Defense Activities	94,000	91,500	0	91,500	92,000
Use of prior year balances	-476	0	-2,108	-2,108	0
Subtotal, Other Defense Activities	93,524	91,500	-2,108	89,392	92,000
Defense Environmental Restoration and Waste Management					
Operating Expenses					
Public Health Activities ^a	0	12,000	0	12,000	20,000
Total, Environment, Safety and Health	156,895	153,898	-5,078 ^b	148,820	162,750

^aPublic Health Activities funded in the Defense Environmental Restoration and Waste Management Appropriation were transferred by the Congress from EM for EH to manage in FY 1999.

^bAllocated share of the congressionally prescribed general reductions in the Energy Supply and Other Defense Activities Appropriations to be taken from uncosted balances.

Staffing Profile

(Whole FTEs)

	FY 1998 Comparable Appropriation	FY 1999 Budget Request	FY 2000 Request
Full-Time-Equivalents			
Energy Supply	175	129	124
Other Defense Activities	200	226	221
Total, Full-Time-Equivalents	375	355	345

Funding by Site

(dollars in thousands)

	FY 1998	FY 1999	FY 2000	\$ Change	% Change
Albuquerque Operations Office					
Los Alamos National Laboratory	270	270	270	0	0.0%
Pantex	150	150	150	0	0.0%
Sandia National Laboratories	365	345	345	0	0.0%
Albuquerque Operations Office	113	65	65	0	0.0%
Total, Albuquerque Operations Office	898	830	830	0	0.0%
Chicago Operations Office					
Argonne National Laboratory	1,000	680	680	0	0.0%
Brookhaven National Laboratory	2,615	2,565	2,565	0	0.0%
Chicago Operations Office	1,748	2,050	2,050	0	0.0%
Total, Chicago Operations Office	5,363	5,295	5,295	0	0.0%
Idaho Operations Office					
Idaho National Engineering & Env Laboratory	300	300	300	0	0.0%
Radiological & Environmental Sciences Laboratory	1,400	1,400	1,400	0	0.0%
Idaho Operations Office	1,700	1,700	1,700	0	0.0%
Total, Idaho Operations Office	3,400	3,400	3,400	0	0.0%
Nevada Operations Office					
Bechtel Nevada	2,410	2,410	2,410	0	0.0%
Oakland Operations Office					
Lawrence Berkeley Laboratory	550	590	590	0	0.0%
Lawrence Livermore National Laboratory	3,738	3,730	3,730	0	0.0%
Oakland Operations Office	21,575	22,975	22,993	+18	+0.1%
Total, Oakland Operations Office	25,863	27,295	27,313	+18	+0.1%
Oak Ridge Operations Office					
Lockheed Martin Energy Systems	530	495	495	0	0.0%
Oak Ridge National Laboratory	7,525	5,190	4,990	-200	-3.9%
Oak Ridge Institute for Science & Education	5,228	4,645	4,577	-68	-1.5%
Office of Scientific & Technical Information	265	255	255	0	0.0%
Oak Ridge Operations Office	1,400	0	0	0	0.0%
Total, Oak Ridge Operations Office	14,948	10,585	10,317	-268	-2.5%
Ohio Field Office					
Fluor Daniel Fernald	25	25	25	0	0.0%
Richland Operations Office					
Pacific Northwest National Laboratory	7,793	7,300	7,300	0	0.0%
Hanford Environmental Health Foundation	50	50	50	0	0.0%
Richland Operations Office	1,861	1,480	1,480	0	0.0%
Total, Richland Operations Office	9,704	8,830	8,830	0	0.0%
Rocky Flats Field Office					
Kaiser Hill Co.	1,140	1,200	1,200	0	0.0%

(dollars in thousands)

	FY 1998	FY 1999	FY 2000	\$ Change	% Change
Rocky Flats Field Office	25	25	25	0	0.0%
Total, Rocky Flats Field Office	1,165	1,225	1,225	0	0.0%
Savannah River Operations Office	400	50	50	0	0.0%
All Other Sites					
Headquarters	95,092	93,953	103,055	+9,102	+9.7%
Subtotal, Environment, Safety and Health	159,268	153,898	162,750	+8,852	+5.8%
Use of prior year balances	-2,373	-5,078	0	+5,078	+100.0%
Total, Environment, Safety and Health	156,895	148,820	162,750	+13,930 ^a	+9.4%

^aThe total change of \$13,930,000 from FY 1999 to FY 2000 primarily results from: 1) an increase of \$8,000,000 in the Defense EM Public Health Activities program (from \$12,000,000 in FY 1999 to \$20,000,000 in FY 2000) which Congress transferred from EM for EH to manage, and 2) the net effect of the FY 1999 allocated share of congressionally prescribed reductions in the Energy Supply and Other Defense Activities appropriation.

Program Performance Measures

EH places its emphasis on accident prevention and excellence in protecting worker and public safety and health and achieving effective environmental standards. Success will be measured by fewer radiological and toxicological contamination events, fewer abnormal operating events, and fewer procedural violations.

EH serves as the Departmental advocate for institutionalizing effective and integrated safety management, which focuses on the key tenets of work planning, hazard analysis and hazard control. Success is measured by the implementation of enhanced work planning systems at DOE sites.

EH incorporates the existing risk-based environment, safety, and health planning and budgeting process into all new major Management and Operating and Management and Integrating Contractors contracts scheduled for renewal. Success is measured by inclusion of environment, safety, and health provisions in 100 percent of the Management and Operating and Management and Integrating Contractors contracts.

EH supports the systematic collection, analysis, and sharing of data on worker illness and injury. Success is measured by the early detection of emerging health issues and the implementation of improved health and safety practices at DOE sites.

EH performs vulnerability studies to identify environment, safety, and health vulnerabilities across the complex. Success will be measured by the reduction of the number of unaddressed serious vulnerabilities at DOE facilities from the current several dozen to zero by the end of FY 2000.

EH's multi-disciplinary, fully integrated oversight process for environment, safety, health, and safeguards and security evaluations has matured. Oversight activities serve as a catalyst for improvement and bring significant issues to senior management's attention. Success will be measured by downward trends in previously identified issues that lead to environmental releases, occupational injury and illness and recurrence of accidents.

EH is implementing nuclear safety standards for work in progress that will provide for the health and safety of workers, the public and the environment. Success will be measured by the effectiveness in implementing and complying with these nuclear safety standards on a DOE-wide basis.

The field, contractors, and outside organizations continue to adopt EH standards. Success is measured by a decrease in lost work days due to occupational illness or injury, a decrease in the number of personnel contaminations with radionuclides, and a decrease in the number of serious accidents where policy is a root cause of the problem.

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Environment, Safety and Health

Date

Environment, Safety and Health Energy Supply

Program Mission

The Office of Environment, Safety and Health (EH) is the major source of technical talent for the Department of Energy (DOE) in the areas of nuclear facility safety, worker safety and health, environmental management, and health studies. EH has set up a Corporate Safety function to facilitate transition of safety and health from internal regulation to that of licensing and regulation of safety and health to external regulation. As DOE's independent advocate for safety and health, EH assists line management in implementing major safety assurance and environmental compliance programs, and develops policies and standards related to environment, safety and health protection. EH staff is expert in the disciplines of nuclear safety, radiation protection, environmental protection, industrial hygiene, industrial safety, public health, construction safety, and risk management. EH activities funded within the Energy Supply appropriation are concentrated into three business lines within one operating decision unit: Technical Assistance; National Environmental Policy Act (NEPA); and Management and Administration. In addition, a program direction decision unit includes a portion of EH Federal staff and the EH Working Capital Fund.

EH activities include a wide range of functions that support key Departmental missions, address emerging safety vulnerabilities, nuclear and industrial hazards, and develop improved methods of managing or implementing programs. A substantial portion of these activities are also directed at performing crosscutting DOE-wide environment, safety and health functions analogous to those performed by any corporate safety office; e.g., supporting accreditation programs for radiation protection monitoring, administering DOE's Voluntary Protection Program for enhancing safety management, and collecting and analyzing DOE-wide environment, safety and health performance data to identify adverse trends or issues and assessing corporate vulnerabilities. EH maintains close contacts with private industry, regulatory agencies, and national environment, safety and health organizations, and facilitates information exchanges between DOE line management and counterparts in the private sector. EH staff also assist DOE managers in developing improved lessons-learned strategies; planning and conducting work (Enhanced Work Planning which is an integral part of the Integrated Safety Management System); applying regulations (guidance on NRC regulation); and providing radiation protection program management. EH activities support line program efforts to prevent injuries and illnesses; establish environment, safety, and health budget priorities; advocate cost-effective environmental management; and avoid risks attendant to the often unprecedented hazards that must be managed effectively across DOE.

The activities performed by the three business lines in support of the EH mission are as follows:

Technical Assistance activities involve DOE-wide safety functions that address emerging safety vulnerabilities, significant nuclear and industrial hazards, and improved methods for managing or implementing safety programs in support of Departmental missions. Additionally, this program provides a process for advocating the Department's position on emerging environmental regulations proposed by other Federal agencies, and assures that the Department's interests are considered in the formulation of cost-effective environmental standards affecting DOE. It also supports the Department's ability to represent the national position on environmental and radiation protection issues in the international standard-setting communities. Also, support is provided to: crosscutting Department-wide functions which ensure the quality of environment, safety and health monitoring; safety and health protection of

Federal and contractor employees; programs for strengthening safety performance; communication of environment, safety and health program guidance and practices; and lessons learned, including the maintenance and operation of an operating experience database.

National Environmental Policy Act (NEPA). EH provides technical assistance to DOE line management responsible for NEPA that enhances managers' decisionmaking, builds public trust, and minimizes the cost and time for document preparation and review while maintaining quality.

Management and Administration activities provide for the centralized management and direction of EH activities and include: budget and planning; systems support; information management; technical training and professional development; and DOE-wide assistance for the environment, safety, and health business and budget planning, execution and tracking processes.

Program Goals

- Provide technical operational assistance to provide quality, timely, efficient and effective environment, safety and health programs that meet priority needs and receive high customer satisfaction.
- Provide an effective system of policies, requirements, guidance and technical standards that protect the environment and enhance public and worker safety and health.
- Facilitate the effective implementation of the NEPA process enhancing efficiency and fostering public trust.
- Advocate the Department's position on emerging environmental regulations and standards to promote cost-effective, external regulatory programs protective of human health and the environment.
- Provide health physicists, industrial hygienist, and radiation scientist resources to improve the Department's ES&H activities.
- Maintain Department-wide business and budget planning and execution processes that identify environment, safety and health vulnerabilities and enable effective line program allocation and expenditure of environment, safety and health resources to the highest risk and significant safety issues.
- Provide an integrated information management program, including an operating experience database, that enhances environment, safety and health performance.
- Improve the performance and effectiveness of the Department's workforce and contractor employees in matters related to environment, safety and health through improved safety analyses and an effective lessons learned program.
- Provide corporate interface with external regulators to facilitate transition of jurisdiction for regulation of safety and health across the DOE complex.

Program Objectives

- Provide specialized technical assistance to line management to address environment, safety and health issues; identify processes that lead to improved performance.
- Provide an exchange of operating experience data and lessons learned strategies; promote safety management through analysis.
- Identify policy, requirements, guidance and standards in existing environment, safety and health directives, and integrate component parts into a new environment, safety and health directive system, and into a standards-based safety management system.
- Develop standards and implementation tools, as needed, that promote environmental and public protection goals in a more cost-effective and timely manner.
- Ensure appropriate review of Safety Analysis Reports (SARs), risk analyses and operational analyses.
- Develop environment, safety and health contract reforms that provide incentives for quality and timely performance and encourage innovative contracting approaches.
- Ensure the completion of timely and adequate NEPA reviews; ensure the consistency and quality of NEPA documents; and increase the efficiency of the NEPA process.
- Facilitate the transfer of DOE information and concerns to external regulatory authorities in support of formulating protective, cost-effective environmental regulations, directives and standards (both national and international) that reflect the Department's interests, including optimization of limited environmental protection and pollution prevention resources.
- Ensure the timely communication of DOE-specific guidance and instruction on the interpretation and implementation of newly-promulgated external environmental regulations, directives and standards to DOE line management where knowledge of, or expertise with, new environmental requirements is limited or does not exist.
- Streamline the environmental review process.
- Support the implementation of DOE-wide environment, safety and health budget planning and execution processes to improve accountability of contractors for environment, safety and health performance.
- Improve information management by enhancing EH's ability to provide quality environment, safety and health information to the public, DOE and other stakeholders; and promote safety management through analysis.
- Lead a transition from a prescriptive compliance-based approach to safety to a performance-oriented approach that provides a standards-based, graded approach to enhance facility safety.
- Foster robust academic programs for health physicists, industrial hygienists and radiation scientists that will provide an academic resource, including minority institutes, to assist the Department in technical studies.
- Act as the corporate point of contact for external regulation of DOE sites and facilities.

- Assure that workers are protected, to the maximum extent practicable, from hazardous and radioactive materials handling and operations.
- Maintain programs that promote and recognize excellence in safety and health.
- Support programs to enhance work planning, self-assessment and Integrated Safety Management Systems.
- Provide specialized programs for orientation, guidance and standards to prepare the Department for external regulation and facilitate its smooth transition.
- Develop and facilitate safety during closure of DOE's excess facilities across the DOE complex.
- Support and improve upon the safety and health programs across the DOE complex.

Performance Measures

The performance measures related to environment, safety and health activities are both qualitative and quantitative in nature. Some performance measures are:

- Improved understanding of the health effects associated with nuclear weapons production, testing, and use within past, current, and future DOE activities.
- Reduced worker health and safety impacts; no fatalities and fewer serious injuries; fewer instances of significant worker exposures; and lower overall total exposures to radiological and toxicological materials.
- Fewer radiological and toxicological contamination events; fewer abnormal operating events; fewer procedural violations; reduced non-compliance with external environmental requirements; and increased pollution prevention.
- Improved implementation tools to enhance environmental performance and reduce compliance/non-compliance costs.
- Decreased number of serious accidents where environment, safety and health policy is a root cause of the problem.
- Creation and implementation of a methodology to validate and authenticate information published by EH.
- Issuance of an annual report on ES&H expenditures/trends, accomplishments and emerging issues.

Significant Accomplishments and Program Shifts

Significant accomplishments and program shifts are defined within the respective business line descriptions that follow.

Funding Profile

(dollars in thousands)

	FY 1998 Current Appropriation	FY 1999 Original Appropriation	FY 1999 Adjustments	FY 1999 Current Appropriation	FY 2000 Request
Energy Supply					
Operating Expenses					
Technical Assistance	21,444	16,445	0	16,445	16,445
NEPA	3,000	2,552	0	2,552	2,500
Management & Administration	17,274	13,003	0	13,003	12,807
Program Direction	23,550	18,398	0	18,398	18,998
Subtotal, Energy Supply	65,268	50,398	0	50,398	50,750
Use of prior year balances	-1,897	0	-2,970 ^a	-2,970	0
Total, Energy Supply	63,371	50,398	-2,970	47,428	50,750

Public Law Authorization:

Public Law 95-91, "Department of Energy Organization Act"

^a Allocated share of the congressionally prescribed reduction in the Energy Supply Appropriation to be taken from uncosted balances.

Funding by Site

(dollars in thousands)

	FY 1998	FY 1999	FY 2000	\$ Change	% Change
Albuquerque Operations Office					
Sandia National Laboratories	180	160	160	0	0.0%
Chicago Operations Office					
Argonne National Laboratory	1,000	680	680	0	0.0%
Brookhaven National Laboratories	805	755	755	0	0.0%
Chicago Operations Office	1,248	1,450	1,450	0	0.0%
Total, Chicago Operations Office	3,053	2,885	2,885	0	0.0%
Idaho Operations Office					
Idaho National Engineering & Env. Lab.	150	150	150	0	0.0%
Radiological & Environmental Sciences Laboratory	1,400	1,400	1,400	0	0.0%
Idaho Operations Office	1,700	1,700	1,700	0	0.0%
Total, Idaho Operations Office	3,250	3,250	3,250	0	0.0%
Oakland Operations Office					
Lawrence Berkeley Laboratory	510	550	550	0	0.0%
Lawrence Livermore National Laboratory	585	530	530	0	0.0%
Oakland Operations Office	850	1,175	1,193	+18	+1.5%
Total, Oakland Operations Office	1,945	2,255	2,273	+18	+0.8%
Oak Ridge Operations Office					
Office of Scientific & Technical Information	265	255	255	0	0.0%
Oak Ridge Institute for Science & Education	2,720	2,045	1,977	-68	-3.3%
Lockheed Martin Energy Systems	530	495	495	0	0.0%
Oak Ridge National Laboratory	7,295	4,710	4,510	-200	-4.3%
Total, Oak Ridge Operations Office	10,810	7,505	7,237	-268	-3.6%
Richland Operations Office					
Pacific Northwest National Laboratory	4,180	3,480	4,080	+600	+17.2%
All Other Sites					
Headquarters	41,850	30,863	30,865	+2	0.0%
Subtotal, Energy Supply	65,268	50,398	50,750	+352	+0.7%
Use of prior year balances	-1,897	-2,970	0	+2,970	+100.0%
Total, Energy Supply	63,371	47,428	50,750	+3,322	+7.0%

Site Description

Albuquerque Operations Office

Albuquerque Operations Office is located on Kirtland Air Force Base in Albuquerque, New Mexico. The primary mission continues to be stewardship and maintenance of the nation's nuclear weapons stockpile. In addition to the national security mission, the Operations Office also devotes significant resources to restoring and improving the environmental quality of operations.

Sandia National Laboratories

Sandia National Laboratories' main laboratory is a national security laboratory located on Kirtland Air Force Base in Albuquerque, New Mexico. Sandia provides technical support in the evaluation of long term dry storage of K-Basin Spent Nuclear Fuel, taking into account the associated physical and chemical changes. Sandia also provides assistance in the development of software for radiological hazard analyses at DOE facilities.

Chicago Operations Office

Chicago Operations Office, Chicago, Illinois, is responsible for overseeing the operation of contractor-operated, multi-program laboratories such as Argonne National Laboratory and Brookhaven National Laboratory. In addition, Chicago Operations provides contractor support for EH's information management communications program including technical assistance for its local area network requirements and opportunities to develop, implement and evaluate stakeholder involvement, concepts, and processes. Chicago Operations Office also provides technical assistance in addressing methods to learn from worker error events, identify worker performance problems, and enhance worker safety behavior.

Argonne National Laboratory

Argonne National Laboratory is 25 miles southwest of Chicago's Loop. Argonne provides support in resolving the Nation's environmental, safety, and health problems and promotes environmental, safety and health stewardship. Argonne provides technical support on environmental and public protection issues, including analysis of emerging rulemakings; develops environmental guidance materials and implementation tools; develops DOE performance summaries on air resource protection; and implements Clean Air Act requirements. Argonne also provides technical expertise for water resources, and human and ecological risk assessments related to DOE releases. Argonne provides technical support on information issues and assists in managing information systems.

Brookhaven National Laboratory

Brookhaven National Laboratory (BNL) is located in Upton, New York on Long Island. As a non-defense research institution, BNL is dedicated to basic and applied investigation in a multitude of scientific disciplines. BNL provides technical support in the development of tools, case studies, and analyses related to radiation protection issues with particular emphasis on the ALARA (as low as

reasonably achievable) process. BNL also provides technical support in conducting reviews of safety analysis and risk assessment documents such as Environmental Assessments (EA), Environmental Impact Statements (EIS), Safety Analysis Reports (SAR), and Basis for Interim Operations (BIO). BNL provides technical support in the development of rules, orders, safety guides, and standards. These documents may include Safety Analysis Reports, technical safety requirements, waste disposal standards, and fire protection standards. BNL provides technical assistance for the Enhanced Work Planning program by implementing its Onsite Technical Assistance Program in the area of enhanced work planning and control.

Idaho Operations Office

Idaho Operations Office, Idaho Falls, Idaho, uses applied engineering to clean up the cold war legacy, execute multi-program missions, and leverage the Idaho National Engineering and Environmental Laboratory's expertise with emerging technology to meet the Nation's needs. In addition, Idaho Operations Office supports EH's technical information system by providing data collection and systems development support.

Idaho National Engineering and Environmental Laboratory

Idaho National Engineering and Environmental Laboratory (INEEL) is located 44 miles outside of Idaho Falls, Idaho. Lockheed Martin Idaho Technologies Company, as the prime contractor, provides technical support for information systems which includes maintaining the Occurrence Reporting and Processing System (ORPS) for use by DOE complex-wide. INEEL reviews policy and/or guidance documents that foster improvements in both performance and cost effectiveness of DOE's construction safety and hoisting and rigging programs.

Radiological and Environmental Science Laboratory

Radiological and Environmental Science Laboratory (RESL), Idaho Falls, Idaho, focuses primarily on analytical chemistry, radiation protection, and environment, safety and health activities. RESL supports the DOE Laboratory Accreditation Program (DOELAP) by administering the performance evaluation program for personnel dosimetry systems and acts as the performance testing laboratory. RESL receives applications, conducts test sessions, coordinates on-site assessments, and recommends accreditation as appropriate.

Oakland Operations Office

Oakland Operations Office, Oakland, California, is distinguished by its multi-program expertise in the following areas: national security; environment, safety and health; and biomedical/environmental sciences. The Oakland core competencies to support the success of these programs include: program/project execution; laboratory contract management; environment, safety, health and safeguards and security oversight; and business operations support. Oakland provides grant assistance for Fellowship Programs in areas such as radiation science, health physics.

Lawrence Berkeley Laboratory

Lawrence Berkeley Laboratory, Berkeley, California, pursues basic and applied research that advances the frontiers of science and solves a broad spectrum of national problems. It is a multi-program laboratory that serves the Nation's needs in technologies and environment, safety and health activities.

Lawrence Livermore National Laboratory

Lawrence Livermore National Laboratory (LLNL) is located in California's Tri-Valley region east of San Francisco. Lawrence Livermore conducts research in the national interest in the areas of advanced defense technologies, energy, environment, biosciences and basic sciences. LLNL also provides assistance in the development of rules, orders, guides and standards relating to safety at DOE nuclear facilities.

Oak Ridge Operations Office

Oak Ridge Operations Office, Oak Ridge, Tennessee, is responsible for research and development, defense programs, environmental management, and environment, safety and health activities. There are three major plant complexes on the Oak Ridge Reservation: Oak Ridge National Laboratory; Y-12 Plant; and the East Tennessee Technology Park, as well as the Oak Ridge Institute for Science and Education and the American Museum of Science and Energy. Together, these facilities represent a technological and educational resource and a major component of the East Tennessee Technology Corridor.

Office of Scientific and Technical Information

Office of Scientific and Technical Information (OSTI), Oak Ridge, Tennessee, is responsible for leading the Department's Technical Information Management Program and for providing direction and coordination for the dissemination of scientific and technical information. OSTI maintains technical information and DOE reports that EH staff access through OSTI.

Oak Ridge Institute for Science and Education

Oak Ridge Institute for Science and Education (ORISE), Oak Ridge, Tennessee, is a Department of Energy facility managed and operated by Oak Ridge Associated Universities. With a diverse array of complementary, and often unique programs, they are a resource for science education programs, emergency preparedness and response, radiological site characterization and other integrated scientific and technical expertise. ORISE provides grant assistance for Industrial Hygiene, Health Physics, and minority fellowships program awards.

Lockheed Martin Energy Systems

Lockheed Martin Energy Systems (LMES), Oak Ridge, Tennessee, carries out environmental management and restoration, environment, safety and health activities, manufacturing technologies, and other activities of national importance. LMES provides technical support and analysis on environmental protection issues associated with cultural resource management, water resource protection, and ecological resource protection including: analysis of emerging rulemakings, hazardous waste management, environmental restoration emerging rulemakings, and the development of environmental guidance materials. LMES provides technical support in radiological characterization, interagency

radiological site assessment, radiological dosimetry and risk analyses for public and environmental protection, and development of radiological guidance materials to convey regulatory requirements. LMES performs technical reviews of documents prepared in compliance with the National Environmental Policy Act (NEPA). They also provide analysis and assistance in preparing NEPA guidance documents. LMES provides technical support in the operations of the DOE Technical Standards Program. In addition, they also provide safety management, computer capabilities, technical editing, and related expertise to assist with the management of DOE Safety Programs in the areas of electrical safety and fire protection.

Oak Ridge National Laboratory

Oak Ridge National Laboratory (ORNL), Roane County, Tennessee, is a multi-program science and technology laboratory. Scientists and engineers at the laboratory participate and support environment, safety, and health activities; increase the availability of clean, abundant energy; restore and protect the environment; and contribute to national security. ORNL provides technical expertise required to maintain safety methods capability available to all DOE criticality safety activities. ORNL provides assistance in the development and maintenance of criticality requirements and standards. ORNL also provides technical support in collecting, analyzing, and reporting environment, safety, and health requirements and budget requests to ensure that high priority projects are addressed during the budget process. The laboratory provides technical support in the development of risk-based, integrated worker safety programs through the development of various technical standards and guides, workshops, and training material. ORNL also assists in the DOE Voluntary Protection Program which is designed to provide a vehicle for DOE to recognize excellence in safety and health programs at its contractor facilities. The laboratory provides technical support to the Federal Employee Occupational Safety and Health (FEOSH) program in the development and implementation of the FEOSH program. ORNL also provides technical assistance in implementing the EH Onsite Technical Assistance Program.

Richland Operations Office

Richland Operations Office, Richland, Washington, manages waste products; develops, applies, and commercializes technologies; manages environment, safety and health activities; and supports cleanup and environmental restoration.

Pacific Northwest National Laboratory

Pacific Northwest National Laboratory (PNNL), Richland, Washington, develops and delivers new and effective environment, safety and health technologies. PNNL provides technical support on environmental and public protection issues, including analysis of emerging rulemakings, development of environmental guidance materials and implementation tools. This technical support includes development of DOE performance summaries on air resource protection and implementation of Clean Air Act requirements, water resources, and human and ecological risk assessment related to DOE releases. PNNL provides technical expertise in all aspects of radiological operations at DOE sites with Radiological Control Programs. This expertise involves radiological evaluations that monitor radiological practices, processes, and systems across the DOE complex.

PNNL provides technical support for the DOE Chemical Safety Program. Technical support is provided for health physics in the development of implementation guides, technical standards and technical solutions of specific radiological control problems. PNNL supports the development and implementation of the DOE Laboratory Accreditation Program, as well as the Voluntary Protection Program, Enhanced Work Planning, Federal Employee Occupational Safety and Health Program and other overall safety programs.

All Other Sites - Headquarters (Includes Commercial Contracts, Other Federal Agencies, and Universities)

Contractors provide:

- Technical and analytical support services relative to the implementation of and compliance with environmental statutes and regulations. Contractors provide technical support in the preparation of environmental guidance materials for DOE Headquarters program offices and DOE field organizations, and for document preparation in response to requirements of the National Environmental Policy Act (NEPA), DOE Orders and regulations pertinent to the Department. This includes reviewing environmental regulations and legislation to determine impact on DOE's NEPA compliance process and evaluating the effectiveness of DOE initiated reforms to improve its implementation of NEPA.
- Technical support for the Performance Indicator Program. They gather, analyze, trend, and report data to enhance the utility of the environment, safety and health reports presented to DOE senior management. They provide technical support in analyzing safety issues and concerns across the DOE complex. This includes support for various vulnerability studies such as the Spent Nuclear Fuel Study. They provide technical assistance in developing practical, cost-effective approaches and strategies for integrating environment, safety and health aspects into the decontamination and decommissioning projects at DOE sites.
- Technical support in the development and publication of an Operating Experience Weekly Summary to improve safety throughout DOE by applying lessons learned from previous occurrences. In addition, technical and analytical services are provided relative to EH information systems, computer support and video-teleconferencing. Technical support is also provided for the fellowship and faculty awards.
- Technical support and assistance in: analyzing results from technical support and assistance projects, and sharing lessons learned throughout the DOE complex to accelerate effective implementation of Integrated Safety Management; providing qualified safety and health professionals to perform research on questions delivered by DOE Response Line personnel; and providing technical assistance and support on matters relating to rulemaking activities.

The U.S. Department of Transportation/Volpe Systems provides technical support to the Aviation Safety program. Contractual support is provided as needed on a variety of tasks such as Information Outreach and Communication Outreach. The National Institute of Standards and Technology provides technical support for the DOE Laboratory Accreditation Program for Radiobioassay.

Technical Assistance

Mission Supporting Goals and Objectives

Technical Assistance has two fundamental goals: improving worker and nuclear facilities safety and protecting the environment. These activities often require the development of novel analysis tools and approaches, because the nature and mix of radioactive, hazardous, and toxic materials at DOE facilities are frequently one of a kind and unique. Efforts span: the design, construction, operation, maintenance, decontamination and decommissioning (D&D) and cleanup of nuclear weapons production and research-related facilities; construction safety; work planning activities, including techniques to identify, evaluate, and eliminate hazards; and identification of technologies and innovative adaptations of existing practices. Policy support and technical assistance is provided to support transactions with affected external regulatory agencies and with impacted Headquarters programs and field organizations. To enhance safety, support includes assistance to line management in developing Integrated Safety Management Systems; maintaining a corporate operating experience database; promoting effective operating experience analyses; applying WorkSmart Standards, and continuing Departmental Standards Committee initiatives. To help ensure safe operation of nuclear facilities and attendant hazardous activities, EH also develops and implements nuclear and worker safety policy requirements and standards including DOE Orders, rules, guidance documents, and technical standards. In the development of nuclear and worker safety requirements and standards, the Department interacts with other industrial, governmental, and international groups. In cases where DOE has unique nuclear conditions or hazards, particularly those involved in weapons production, DOE develops and applies its own DOE Technical Standards. These activities involve operation of the technical standards program in compliance with the National Technology Transfer and Advancement Act of 1995. EH develops and issues environmental policy to implement new legislation, regulations, or Executive Orders, or to otherwise protect the public and the environment when a deficiency in programs or operations is identified.

EH also serves as the central Departmental coordinating point for advocating the Department's position on external environmental regulations, directives and standards proposed by other Federal agencies. The primary purpose of this corporate activity is to assure the Department's interests are reflected in the formulation of protective, cost-effective environmental requirements applicable to DOE facilities and operations. This corporate activity is accomplished by tracking emerging rulemakings proposed under the authority of several key environmental laws, such as the Clean Air Act, Clean Water and Safe Drinking Water Acts, Comprehensive Environmental Response, Compensation and Liability Act, Emergency Planning and Community Right-to-Know Act, Atomic Energy Act and Resource Conservation and Recovery Act. The views of all of the Department's Program Offices and Field Organizations are solicited and considered with regard to a proposed rule and to the development of a consolidated Departmental response based on an internal analysis of the proposal and all comments received. Direct coordination with affected DOE elements is also conducted to ensure the formulation of an independent corporate position that best reflects the needs and interests of the entire complex. This DOE corporate position frequently considers, or is common to, energy sector and industry needs. In addition, this program supports the development of guidance and instruction for DOE line management to follow on the compliant interpretation and cost-effective implementation of new environmental requirements being promulgated by external regulatory agencies under the authority of the aforementioned laws. This guidance and instruction provides the Department with tools for

implementing public and environmental protection goals in a manner that helps optimize time, cost and compliance considerations. The program also consists of mandatory corporate environmental reporting, and participation on numerous intra-and inter-agency and international working groups, committees and organizations as the Departmental representative on environmental and radiation protection issues. EH acts as the corporate interface with the Occupational Safety and Health Administration (OSHA) where DOE has privatized facilities, and acts as their corporate interface with the Nuclear Regulatory Commission (NRC) where radiation protection or nuclear facility safety questions arise with respect to external regulation activities.

Significant Accomplishments

- Specialized technical assistance is provided to help line managers: develop site or facility-specific disposition plans; resolve nuclear safety issues evolving from decontamination and decommissioning (D&D) activities; work to ensure the safety of D&D workers from radiation and toxic exposure; and apply lessons-learned and good practices used by industry, the NRC and the International Atomic Energy Agency. During FY 1998, the program participated in the development of DOE Standard 1120-980, "Integration of Environment, Safety and Health into Facility Disposition Activities," and developed training sessions to implement this standard. During FY 1999, assistance is provided to implement this standard and to develop criteria for transitioning facilities at the end of a mission. (FY98: \$200; FY99: \$80; FY00: \$80)
- Specialized technical support is provided to program and field offices as they implement Integrated Safety Management (ISM). ISM implementation is accomplished by using appropriate standards to ensure adequate protection for workers, the public and the environment against the hazards associated with facility operations. The ISM process implementation programs are underway at all DOE sites. Specifically, specialized assistance is being provided to the Tank Waste Remediation System (TWRS) Privatization and K-Basin Spent Nuclear Fuel stabilization projects at Hanford, and the Advanced Mixed Wastes Treatment Project at Idaho site during FY 1998 and FY 1999. (FY98: \$200; FY99: \$140; FY00: \$140)
- Three DOE-wide assessments have helped DOE management better understand the condition and safety of spent nuclear fuel, plutonium, and highly enriched uranium stored at DOE sites across the nation. Although line management developed action plans to correct vulnerabilities found by the assessments, significant numbers of vulnerabilities remain uncorrected, and line management has had difficulty in tracking the status of corrective actions. EH is providing an independent compilation and evaluation of the status of the 560 vulnerabilities and their corrective actions. During FY 1998, an approach and a database for tracking and evaluating the vulnerabilities was established. During FY 1999, independent status reports on vulnerability resolution is being performed. (FY98: \$300; FY99: \$191; FY00: \$191)
- EH evaluates and recommends new nuclear material technologies to improve the safety of tritium gas handling, plutonium nuclear materials packaging and storage, waste vitrification and stabilization and spent nuclear fuel processing. During FY 1998, significant expert technical support was provided in the preparation of a highly enriched uranium storage standard, and in the evaluation of a mixed oxide (MOX) fuel fabrication technology, Hanford's high level waste vitrification technology, and Idaho's Advanced Mixed Waste Treatment technology. (FY98: \$150; FY99: \$0; FY00: \$0)

- DOE's policy is to authorize conduct of high hazard nuclear operations only after the hazards have been carefully analyzed to determine the potential for accidents and their consequences, and necessary controls are provided to prevent or mitigate them. This is documented in a Safety Analysis Report (SAR) and other reports. The quality of these reports directly affects the safe operation of a facility through implementation of the prescribed controls. This program serves as DOE's corporate center of expertise for reviewing safety and authorization documentation. During FY 1998 and FY 1999, the review of selected SARs and Basis for Interim Operations and the evaluation of authorization bases will be performed at the request of line and field offices. (FY98: \$500; FY99: \$300; FY00: \$300)
- EH provides specialized nuclear safety engineering support to program, field, and Secretarial offices in dealing with the challenges of changing former weapons production facilities to storage and waste management activities, and in consolidating the current weapons complex at Defense program sites. This includes stabilizing nuclear materials not recycled due to production cessation; revising the authorization basis for existing facilities to convert to a standards based approach consistent with modern safety standards; implementing a new regulatory framework (external regulation initiative) for DOE nuclear facilities; dismantling nuclear weapons; and disposing/storing fissionable materials. During FY 1998 and FY 1999, technical evaluation of the Hanford Tank Waste Remediation System (TWRS) Phase I design and the K-Basin Spent Nuclear Fuel (SNF) project is being performed and technical assistance is being provided to the Fort St. Vrain SNF project for the NRC licensing process and Advanced Mixed Wastes Treatment Project. In addition, technical assistance is being provided in the nuclear criticality safety assessments at Hanford, Rocky Flats, LLNL, ANL-W and in developing the Hydroxylamine Nitrate Technical report following the chemical explosion at Hanford. (FY98: \$1,400; FY99: \$1,000; FY00: \$1,000)
- The National Environmental Policy Act (NEPA) requires that DOE evaluate potential environmental consequences of its actions. This activity assists in the overall review of Environmental Impact Statements (EIS) and Environmental Assessments (EA) by evaluating the accident and consequence analysis parts of these NEPA documents. During FY 1998 and FY 1999, accident analysis reviews of approximately 12 selected EISs and EAs will be performed annually. (FY98: \$50; FY99: \$50; FY00: \$50)
- DOE owns many dams and water impoundments, seven of which are classified as high or significant hazard dams according to Federal guidelines. This activity sponsors the required safety inspection of these dams by the Federal Energy Regulatory Commission using Federal Emergency Management Agency guidelines. This activity also manages DOE's Dam Safety Program in accordance with Public Law 104-303 and participates with other dam-owning Federal agencies in the Interagency Committee on Dam Safety. In addition, this activity discharges the Department's responsibility of ensuring that the nuclear aspects of NASA's space missions are performed within acceptable safety margins. During FY 1998, this activity performed inspections of DOE's dams and water impoundments to assure their safety and conducted a nuclear review of the Cassini and Mars 2001 missions. During FY 1999, this activity will perform additional inspections of DOE's dams and water impoundments to assure their safety, and a nuclear review of the Mars 2001 and Europa missions. (FY98: \$325; FY99: \$275; FY00: \$275)

- The Department's ability to understand and learn from events occurring at its facilities is based upon the complex-wide Occurrence Reporting and Processing System (ORPS) managed within EH's Technical Assistance program. ORPS serves the corporate need to collect ES&H data and information as the basis for notification of events, performance measurements, analyses of operations, and lessons learned. Using information obtained primarily from ORPS, EH publishes the Operating Experience Weekly Summary, a document that presents analyses of accidents or unusual events. The similarity of many activities at the various DOE sites presents opportunities to enhance performance, meet environmental, safety, and health objectives, and reduce cost through the application of lessons learned throughout the DOE complex. This activity also publishes Safety Notices which provide more in-depth information on generic or recurring significant safety problems. In addition, special analysis reports are produced periodically, aimed at improving safety in single disciplines, such as decontamination and decommissioning and electrical safety. The DOE ES&H Performance Indicator Report, published quarterly, provides senior DOE management with a concise picture of Departmental performance in relation to performance indicators. Performance measures call attention to events that have directly affected workers and the environment, focus management attention on precursors to events, and provide a means of measuring the progress of risk reduction activities. During FY 1998 and FY 1999, the ORPS (which typically processes over 3000 reports annually) will be maintained and data and information from this system will be utilized in both the lessons learned and performance measurement programs. Fifty-two issues of the Operating Experience Weekly Summary will be published and disseminated to over 4,000 subscribers, and approximately 12 Safety Notices and Special Analysis Reports will be developed and disseminated. In addition, this program will collect and analyze corporate ES&H performance data and publish the Quarterly ES&H Performance Indicator Report, and maintain a new Internet system that allows customers to perform their own analysis. (FY98: \$2,311; FY99: \$1,789; FY00: \$1,789)
- All nuclear facilities in DOE are required by law (10 CFR 835) to establish a radiation protection program that protects workers against radiological exposures. This activity provides assistance to line managers such as guidance, communication, coordination, and technical support in the field implementation of radiation protection programs. These services are provided across DOE sites and among same-site contractor organizations, and deliver valuable information about other sites where similar issues have been addressed, paths forward have been prepared, and solutions have been found. Outside perspectives conveyed to on-site managers and workers enable them to see their programs and activities in a different light. These activities are on-going each year. (FY98: \$300; FY99: \$200; FY00: \$200)
- This activity provides technical support to the Department's Standards Committee (DSC). The DSC, chaired by the Assistant Secretary for the Office of Environment, Safety and Health, establishes processes and criteria for standards-based planning and work at DOE facilities. Best commercial practices are evaluated and effective standards-based work practices are developed and shared across the DOE complex. The standards developed by the DSC are instrumental in providing DOE and contractor line management with the tools necessary to plan and do work faster, better, and cheaper. (FY98: \$350; FY99: \$325; FY00: \$325)
- The Atomic Energy Act requires the Department to self-regulate in the area of nuclear safety. This activity fulfills that requirement and establishes nuclear safety policy and the technical standards necessary to ensure that contractor activities adequately protect people, property and

the environment from radiation hazards. These policies and standards are developed and maintained in collaboration with other nongovernmental and governmental groups and are independently reviewed by the Defense Nuclear Facilities Safety Board. While the Department adopts nongovernment safety standards when appropriate, DOE has unique nuclear hazards and operations, such as weapons production and cleanup, that require separate DOE requirements and standards. This activity also works with the NRC in the development of its nuclear safety requirements to ensure consistency with DOE nuclear safety policy and requirements. The Technical Standards Program, managed by this program, develops and maintains consensus standards for DOE use and coordinates DOE-wide participation in national and international standards-setting organizations. This program also evaluates contractor nuclear facility and operator training programs for effectiveness in implementing and complying with applicable nuclear safety requirements. (FY98: \$1,625; FY99: \$1,625; FY00: \$1,625)

- This activity affords protection to DOE workers, the public and the environment from a criticality accident. KENO is the software code used to perform criticality safety evaluations. In FY 1998, KENO user training and applications assistance was provided to the DOE criticality safety community. Also, technical assistance was provided in the development and maintenance of criticality requirements and standards. (FY98: \$220; FY99: \$220; FY00: \$220)
- EH assists DOE line management in preventing exposures to hazardous and toxic materials by developing cost-effective technical and analytical solutions for use in potentially threatening conditions. FY 1999 funding will develop and implement technical applications guidance for use by the field. In FY 2000 this activity will be incorporated into the hazards analyses and communications. In FY 2000 new activities will include safety and health data collection and analysis, interpretation of significant safety and health data, and creation of newly designed analytical tools and approaches to better identify and disseminate significant worker safety and health impact information. The DOE Worker Safety and Health Response Line now included in this new activity is replacing the "Corporate Services," and is a specific service provided to help resolve uncertainties regarding interpretations of all types of pertinent regulations and DOE Orders. (FY98: \$900; FY99: \$492; FY00: \$492)
- The Decontamination and Decommissioning Project will be folded into an EH Facility Closure Program (FCP) in FY 1999, and will become a corporate-level crosscutting effort to provide Department of Energy (DOE) line managers with expert technical regulatory analyses and technical assistance as part of our support to line programs to better ensure the safe and cost-effective closure of surplus facilities. The technical bases for facility closure requirements were previously developed through the preceding EH Decontamination and Decommissioning (D&D) project during FY 1998 and FY 1999. The FCP initiative will provide technical analysis and clarification of DOE self regulatory expectations. Additionally, the FCP will support the transition to regulatory requirements and interpretations should the DOE proceed with external regulation. Technical assistance will be in the form of workshops/meetings with DOE line and field representatives to ensure both efficiency and consistency with the process of assisting on specific closure requirements and regulatory interpretations. (FY98: \$650; FY99: \$300; FY00: \$300)
- The Department uses aircraft for several missions including: transport of Defense special nuclear materials; critical site security; nuclear emergency response; aerial radiation measurement; and oil pipeline and powerline patrol. Both contracted private sector services and DOE-owned fleet

aircraft are used in these services. Most of the services operate, or are on alert, 24 hours per day. Prior to developing a central office for standardization, aviation policy and technical safety assistance, DOE suffered a very high aircraft accident/incident rate. In 1991 and 1992 alone, DOE lost 12 aircraft and had 17 fatalities. Since the establishment of the Headquarters Aviation Operations Team in 1993, there has been only one accident and no fatality nor injury. The Aviation Operations team has developed and maintains a state-of-the-art accident-prevention information system which provides real-time safety information to operating field elements. In FY 1999, the Team is completing the development of a similar system which will assist with managing maintenance and fiscal information, and will produce mandated periodic reports. The development efforts end in FY 1999, and thereafter only system maintenance is necessary. The Team sends field inspectors to vendor sites to verify safety systems and standardization. These are continuing needs for FY 2000 and thereafter. Support funds for these efforts are leveraged through an interagency agreement with the Department of Transportation, Volpe National Transportation Systems Center. Volpe provides the development and maintenance support for the mission critical systems and shares the technology with other Federal agencies. Additionally, DOE shares its successes through the General Services Administration (GSA) sponsored Interagency Committee for Aviation Policy. (FY98: \$350; FY99: \$350; FY00: \$350)

- In FY 1999, the guidance and interpretation function for the areas of construction safety will be consolidated with other specialized disciplines such as electrical and mechanical safety, fire arms safety, and fire protection that provide technical support for DOE Line Management. In FY 1998, construction safety required only nominal support in the areas of information collection and analyses, maintenance of information data bases, maintenance of documents on-line, and technical communications for these specialized disciplines. The personnel in these safety disciplines provide representation and support to national consensus bodies and advisory committees that are responsible for the development of standards, best management practices and other federal and industry-guidelines and regulations. (FY98: \$300; FY99: \$0; FY00: \$0)
- For FY 2000, the technical assistance program will support a range of line activities, including: broad technical support, such as the guidance and interpretations function for construction safety; and other specialized technical safety disciplines, such as radiation protection, fire protection, industrial safety, industrial hygiene, and electrical safety. Personnel in these technical safety disciplines also provide representation and support to national consensus bodies and advisory committees that are responsible for the development of standards, best management practices and other Federal and industry-guidelines and regulations. Radiation protection activities provide: interpretations, amendments, and exemptions to 10 CFR 835; updated implementation guidance and technical standards; technical assistance to DOE line management on radiation protection to facilitate efficient program implementation and to support specific initiatives such as emergency response; and analysis of radiation exposures to DOE workers. (FY98: \$1,200; FY99: \$1,200; FY00: \$1,200)
- DOE has 26 sites with significant chemical activities. Typically each site has more than 100,000 chemical containers, many of which are not fully characterized. The Department experienced a serious chemical explosion and other chemically related incidents in FY 1997, which led to the initiation of extensive review and upgrades in chemical safety practices. The upgrade initiative was initiated in FY 1998, however, activity will continue into FY 1999. A new 10-step chemical-safety improvement process has resulted in a significant overall reduction of chemical related

injuries, but there remains much to be done. DOE is characterizing its legacy of chemical hazards and must address new hazards as they are identified. DOE is importing and incorporating the value-added aspects of programs of the Chemical Manufacturers Association (CMA). These CMA programs include Responsible Care and best management practices of the chemical industry. This program will ensure that best practices are adapted to the special needs of each DOE site and implemented. It provides numerous opportunities for partnering among sites and between DOE and industry chemical and safety experts. The program will be extended to ensure that recent lessons learned in chemical safety are permanently captured and implemented in chemical work planning for our significant chemical operations. (FY98: \$400; FY99: \$500; FY00: \$500)

- The Department of Energy Laboratory Accreditation Program (DOELAP) is mandated by regulation 10 CFR 835, and is similar to the Nuclear Regulatory Commission (NRC) private sector National Voluntary Laboratory Accreditation Program (NAVLAP). The DOELAP certifies each DOE facilities' ability to accurately determine a worker's exposure to radiation as measured by individual dosimeters (radiation detection badges) and radiobioassay, the analysis of urine and fecal samples to quantify the presence of any radioactive material inhaled or ingested by the worker. The daily operation of the DOELAP includes irradiating dosimeters and mailing them to facilities, calibration phantoms maintenance, preparation and processing of artificial urine and fecal samples, plus all the many support activities such as record maintenance and data collection. DOELAP accreditation is essential to demonstrate that worker radiation exposure is being measured accurately. A comprehensive, quality tested, internal dosimetry package will be provided to all DOE facilities for the calculation of internal radiation exposures to workers. Finally, extremity dosimetry will be incorporated into the existing whole body personnel dosimetry accreditation program, and accreditation technical standards, based upon national consensus standards, will be developed. (FY98: \$2,400; FY99: \$2,200; FY00: \$2,200)
- The Voluntary Protection Program (VPP) is a nationally recognized program designed to encourage DOE sites to achieve excellence in their safety and health programs. VPP personnel assist sites in preparing for program participation by benchmarking DOE sites through partnering Occupational Safety and Health Administration (OSHA) VPP Star Sites from all sectors of the commercial arena with DOE sites so that DOE sites can learn and benefit from the commercial site efforts. By meeting established criteria, DOE sites can participate in the DOE/VPP program. Program participants are re-evaluated on set schedules to ensure continued adherence to program elements. The DOE-VPP Team provides direct support to field elements that are sponsoring VPP. Efforts include: utilization of specialized technical contact applications for onsite review teams; evaluation of quality control; technical assistance through its customer representative and outreach programs; coordination/networking; development of activities and materials; and interagency partner liaison. The DOE/VPP program is designed to also consider the applicant's achievements in integrated safety management. Onsite evaluations for four sites were performed in FY 1998. In FY 1999, onsite evaluations-program assistance visits for four additional sites are expected. (FY98: \$500; FY99: \$500; FY00: \$500)
- EH established a DOE-wide Federal Employee Occupational Safety and Health (FEOSH) program mandated by the OSH Act, DOE Order 440.1, and 29 CFR 1960. The continuing FEOSH program is prevention-oriented and provides expertise and tools to DOE line managers and field elements for developing and implementing site-specific safety and health programs for

their Federal employees. The FEOSH program focus is to provide hazard intervention strategies that target particularly problematic safety and health issues. The FEOSH program also supports field elements providing specialized technical expertise not available locally; model programs that can be used for several Federal sites; and assistance in the resolution of employee safety and health concerns. (FY98: \$200; FY99: \$200; FY00: \$200)

- Enhanced Work Planning (EWP) is a conduct of work process designed to improve worker safety and health practices which also results in improved work efficiency. The EWP principles are being applied to all work performed at DOE sites. This activity communicates EWP lessons learned among sites, and assists the field in developing a standardized approach to EWP, including work planning procedures, tools for better hazard analysis, hazard control strategies, and improved processes to target employee monitoring and identify health trends. At several DOE sites, EWP is now being implemented on a sitewide basis, and at other DOE sites, new pilots are beginning. In FY 1998, the majority of DOE sites will be implementing EWP programs, and in FY 1999, EWP will be embedded in work activities at virtually all DOE sites. In addition, the professional Federal staff have facilitated the downward trend of this program by sharing lessons learned, and sharing work planning procedures and software tools developed at EWP sites. Therefore, in FY 2000, the Department's sites should be relatively self-sufficient. (FY98: \$1,700; FY99: \$300; FY00: \$0)
- EH provides the Defense Nuclear Facilities Safety Board (DNFSB) liaison, the primary focus of which is to serve as the transactional interface with the DNFSB. Activities to date have included development, coordination and preparation of responses to specific DNFSB recommendations, technical papers, reports, and requests for information on specific technical disciplines under the cognizance of this office which has the Departmental expertise in radiation protection and worker protection issues. In response to DNFSB Recommendation 95-2 and specific concerns by the DNFSB on safety management systems, the office conducted the Worker Protection Criteria initiative in FY 1998 to provide focus and definition for the basis of worker protection programs across the Department. The office will develop in FY 1999 model contract language and performance measures in support of DNFSB Recommendation 95-2, Integrated Safety Management Systems (ISM). The office will also develop tailored approaches to ISM implementation, collect and communicate lessons learned in ISM implementation and establish worker involvement as the eighth principle of ISM. During FY 2000, the projects will focus on moving the test protocols to site wide demonstration at selected sites. This activity will support the Department's ongoing implementation of its Integrated Safety Management Systems (ISMS) with emphasis on worker protection. (FY98: \$400; FY99: \$300; FY00: \$1,100)
- Several preparatory activities are required to ensure the efficient transfer of regulatory jurisdiction from DOE to either OSHA, authorized states, or the Nuclear Regulatory Commission (NRC). This ongoing transitional activity requires identification, review and resolution of significant implementation issues. Increased interactions with all potential federal external regulatory agencies was begun in FY 1997 to define the initial scope of transfer of jurisdiction from self-regulation to external regulation. Efforts are focused on four areas. The first is development of a scope and policy, which is designed to identify those fundamental organizational and structural changes that are needed to facilitate and expedite transition of jurisdiction to external regulators. The second is the matching of external regulator's existing set of regulations and policies through pilot projects, reviews and evaluations, and discussions

among the various staffs. The third involves the provisions of real-time assistance and support to those field elements that are designed for intensive regulatory reviews. This will require the utilization of specialized contractor services to enhance staff capabilities which are limited in external regulatory experience. The fourth area is the development of a guidance and orientation mechanism for DOE field office/element and contractor personnel to ensure support to field and line program elements. Until DOE is regulated by external entities, DOE field offices are responsible for privatizations requiring the divestiture of properties or the investment of private capital on DOE-owned lands. Privatization support includes: resolution of safety and health jurisdictional issues; examination of safety and health issues related to "downsizing;" contract reform; privatization activities; evaluation of safety and health issues resulting from co-located privatized operations; evaluation of DOE's "landlord" responsibilities with respect to worker safety and health; maintenance of a database of DOE sites and facilities whose jurisdiction has been transferred to OSHA; independent assessment of regulatory and resource impacts; and working with the DOE legal staff to assess areas where lapses in safety oversight coverage may exist. (FY98: \$1,400; FY99: \$800; FY00: \$1,200)

- Self-Assessment is an integral part of the Integrated Safety Management policy and program at DOE. The self-assessment module was developed in FY 1998 by EH staff, folded into the overall ISM process and pilot projects developed in the field. Improving self-assessment programs and integrating them into daily work processes and practices translates directly into cost savings as a result of improved productivity, efficiency, and safety. During FY 1999, it is anticipated that initial results from the demonstration efforts will show substantial value from testing a wide range of tools at various DOE sites. This effort will sustain the Department's ongoing implementation of Integrated Safety Management Systems at these demonstration sites. Further progression of this effort in FY 2000 will take place in conjunction with the Department's ongoing efforts to maintain a sustainable ISM system at all DOE sites and will include workshops and lessons learned conferences conducted by EH staff. (FY98: \$0; FY99: \$100; FY00: \$0)
- Chronic beryllium disease (CBD) has been shown to be a very serious health problem at DOE defense and laboratory sites where beryllium was used. Numbers of former DOE beryllium workers have become immunologically sensitized, and others have progressed to a diagnosed disease. This activity supports a Secretariaily-mandated policy for development and execution of a program for disease prevention and exposure control. The objectives are to define safety operating parameters, to establish medical surveillance programs, and to facilitate information exchange for prevention of chronic beryllium disease. This program, the Chronic Beryllium Disease Prevention Program, was initiated in FY 1997 with the efforts of a small Federal staff. In FY 1998, it focused on interim DOE Policy for exposure prevention strategies and initiated rule development on comprehensive program implementation. In FY 1999, specific activities include resolving public comments received on the Notice of Proposed Rulemaking, published in the Federal Register in FY 1998, and publication of the Final Chronic Beryllium Disease Prevention Program rule. FY 1999 activities will also focus on interim DOE Policy to implement lessons learned that will enhance the rulemaking process and final rule. As the Policy rule will be completed in FY 1999, FY 2000 specific activities will include program implementation guidance and support, field program collaborative assistance, and expanded health surveillance. This activity will be supported by Federal staff who have developed the policy. This activity will

be supported by the Federal staff who have developed the policy with the final rulemaking efforts funded in the EH Defense appropriation. (FY98: \$0; FY99: \$800; FY00: \$0)

- Technical Assistance includes the review of environmental documents prepared by line management to verify the adequacy and validity of environmental technical information. This includes technical support on authorization of disposal sites and authorization limits for control and release of property containing residual radioactive material. (FY98: \$305; FY99: \$50; FY00: \$50)
- The Technical Assistance also provides environmental policy advice and interpretation of DOE's rule on radiation standards and associated directives to protect the public and the environment. This includes significant increased assistance in the implementation of guidance to streamlining the approval and implementation process for controlling and releasing residual radioactive material. (FY98: \$143; FY99: \$50; FY00: \$50)
- The program maintains up-to-date DOE-wide policy, directives, and regulations for radiation protection of the public and the environment and general environmental protection that increases the flexibility for implementing requirements in a more effective and streamlined manner, and incorporating within DOE an integrated management systems approach for environmental protection. The program also: reviews and updates environmental policies to reflect "reinventing government" concepts using an integrated management systems approach; and prepares proposed revisions to the Department's Environmental Protection Order. (FY98: \$125; FY99: \$100; FY00: \$100)
- The Technical Assistance program provides environmental guidance, instruction and tools (e.g., regulatory bulletins, information briefs, models/codes, technical standards, management guides) to assist programs in understanding and implementing newly promulgated environmental requirements in the following areas: Clean Air Act, Clean Water and Safe Drinking Water Acts, Atomic Energy Act, Emergency Planning and Community Right-to-Know Act, cultural resource management acts, and hazardous substance release response, waste management and pollution prevention acts; and coordinates with various national and international standard-setting bodies in the development of technical standards pertinent to DOE. (FY98: \$1,660; FY99: \$1,200; FY00: \$1,200)
- The Technical Assistance program also monitors over 200 emerging environmental rulemakings annually, and develops and represents DOE's position on proposed regulations, directives and standards to ensure that DOE's concerns are considered so as to promote efficient and cost-effective implementation of external regulatory programs complex-wide. The program completes reviews and evaluations of over 20 international and national standards and coordinate with numerous national and international organizations on their development. (FY98: \$880; FY99: \$808; FY00: \$808)

Funding Schedule

(dollars in thousands)

	FY 1998	FY 1999	FY 2000	\$ Change	% Change
Technical Assistance	21,444	16,445	16,445	0	0.0%
Total, Technical Assistance	21,444	16,445	16,445	0	0.0%

Detailed Program Justification

(dollars in thousands)

FY 1998	FY 1999	FY 2000
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Technical Assistance

■ Many of the Department's facilities are near or past their intended operational lifetime. Hazards must be evaluated and controls established before each mission change from operation to final disposition (e.g. through shutdown, deactivation, decontamination, and decommissioning). Technical assistance will be provided that is essential to implementing DOE Standard 1120-98, "Integration of Environment, Safety and Health into Facility Disposition Activities", and to implementing facility transition criteria.	200	80	80
■ Hazard and safety analysis and technical safety requirement are important and integral elements of the Department's Integrated Safety Management (ISM) process for all phases of facility operations. As the Department's corporate center of expertise in these areas, assistance will be provided to sites and facilities in implementing ISM, as needed, for facility operations and disposition activities.	200	140	140
■ Follow-up will continue, at a reduced level of funding, on line management progress to correct safety deficiencies and hazards identified by the several complex-wide vulnerability studies (e.g., Plutonium Vulnerability Study, Spent Nuclear Fuel Study, and the Highly Enriched Uranium Vulnerability Study). Although line management has developed action plans to correct the 560 vulnerabilities found in the studies, a significant number remain uncorrected and line management is having difficulty in tracking the status of corrective actions. This activity will develop an independent status report of the vulnerability corrective actions and provide assistance to corrective action projects at Idaho, Savannah River, and Hanford.	300	191	191
■ The selection and application of new nuclear material technologies significantly contributed to DOE's strategic program for nuclear materials storage and waste management activities. Support was completed in the evaluation of applicable projects at the Idaho, Savannah River, and Hanford sites.	150	0	0

(dollars in thousands)

	FY 1998	FY 1999	FY 2000
■ The analysis of potential accidents, their consequences, and the controls to prevent or mitigate them are documented in Safety Analysis Reports (SARs) and other documents. The quality and accuracy of these documents directly affect the safe operation of a facility through the implementation of the controls they prescribe. As the corporate center of expertise in reviewing these documents, assistance will be provided at a limited level in evaluating selected SARs and Basis for Interim Operations (BIOs) at the request of line and field offices	500	300	300
■ EH provides specialized engineering support to program, field and Secretarial offices in a wide spectrum of technical disciplines including nuclear criticality safety, nuclear materials technology, chemical processes, fire protection, regulatory compliance and safety assessments. This specialized engineering assistance will significantly contribute to improving the safety of facility operations throughout the DOE nuclear complex and to developing the essential elements necessary for transitioning DOE's major sites with significant quantities of nuclear waste to external regulation. In addition, a level of assistance will be provided to enhance the safety of nuclear materials and facilities stabilization and consolidation, and waste processing activities	1,400	1,000	1,000
■ EH provides expert technical review of the accident and consequence analysis of Environmental Impact Statements and Environmental Assessments evaluations with regard to the potential consequence of the activity on the public and the environment.	50	50	50
■ This activity assures the safety of DOE's seven hazardous dams and impoundments by sponsoring their inspection by the Federal Energy Regulatory Commission in accordance with Public Law 104-303. The activity supports participation on the Interagency Committee on Dam Safety. In addition to this committee, this activity supports participation on the Presidentially directed Interagency Nuclear Safety Review Panel (INSRP) to ensure that NASA's space missions will not disperse plutonium on earth. Safety reviews will be performed on the upcoming Mars 2001 mission and the Europa mission to Jupiter.	325	275	275

(dollars in thousands)

	FY 1998	FY 1999	FY 2000
■ This activity manages an Occurrence Reporting and Processing System (ORPS) for notifying DOE management of nuclear events occurring at DOE facilities similar to the Nuclear Regulatory Commission's system. These data are compiled and analyzed for the purpose of deriving lesson(s) to be learned to prevent recurrence of a similar event. The lessons learned are disseminated throughout the DOE nuclear community through the publication of an Operating Experience Weekly Summary. When warranted, Safety Notices are also published to provide more in-depth information on significant safety problems and on generic or recurring events. Data will also be collected and analyzed on several dozen performance indicators that highlight activities directly affecting worker safety and protection of the environment. These data will be assimilated into a quarterly Performance Indicator Report which will provide DOE management with the progress made towards improving worker safety and protection of the environment at DOE sites. System improvements are being made to ORPS, which will result in decreased funding requirements in the outyears	2,311	1,789	1,789
■ EH continues to provide specialized nuclear radiation safety expertise to line management in resolving site/facility specific radiological health and safety problems and improving the safety of workers involved with nuclear operations. Activities include providing assistance on implementing 10 CFR 835, developing appropriate radiological engineering capabilities, instituting workshops to train personnel, and integrating essential safety controls into the site's planning, scheduling, and conduct of radiological activities	300	200	200
■ EH provides technical and liaison support to the Department's Standards Committee (DSC). This support includes information systems, materials and facilities for DSC meetings, and preparing DSC reports and documents. Support is also provided in defining criteria for establishing an acceptable standards program for operating facilities and assisting line organizations in incorporating these criteria in the development of standards-based planning and work	350	325	325

(dollars in thousands)

	FY 1998	FY 1999	FY 2000
■ DOE is self-regulating as required by the Atomic Energy Act and, as such, is responsible for establishing the standards to which its contractors must adhere in performing nuclear related and non-nuclear operations. This program is charged with this responsibility and creates and revises the policies and standards necessary to ensure the safety and protection of workers, the public, and the environment in the performance of facility operations. These standards are issued in the form of rules, orders, and various guidance documents, each of which is designed to improve or enhance safe and environmentally benign operations. In addition, interface is maintained with the Defense Nuclear Facilities Safety Board, the Nuclear Regulatory Commission, and other governmental and industry groups on matters concerning nuclear safety and regulation	1,625	1,625	1,625
■ Continued support is required to maintain a quality safety methods capability available to DOE Criticality Safety activities. KENO (software code used to perform criticality safety evaluations) user training and applications assistance must be maintained. Development and maintenance of criticality requirements and standards must be continued. Improvements of the software code (KENO) must be made in order to establish a more user-friendly nuclear criticality safety software package	220	220	220
■ Hazards analyses includes safety and health data collection and analysis, interpretation of significant safety and health data and creation of newly designed analytical tools and approaches to better identify, analyze, and disseminate significant safety and health hazard impacts to the complex. The DOE Worker Safety and Health Response Line is a specific service provided to help resolve uncertainties regarding interpretations of all types of pertinent regulations and DOE Orders. The FY 2000 funding level is a best estimate based on past experience. This effort supports the following commitment made in the Performance Agreement between the Secretary of Energy and the Assistant Secretary for ES&H: Ensure the safety and health of the DOE workforce and members of the public, and the protection of the environment in all Departmental activities.	900	492	492

(dollars in thousands)

FY 1998	FY 1999	FY 2000
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- In FY 1999, the Decontamination and Decommissioning (D&D) project will transition into the Facility Closure Program and will include the information and technical standard developed under the D&D phase of the project. The EH Facility Closure Program (FCP) is an EH corporate-level crosscutting effort to provide DOE line managers with expert technical regulatory analyses and support. This level-of-effort activity is part of our assistance to line programs to ensure the safe and cost-effective closure of surplus facilities. The basis for facility closure requirements was previously developed through the preceding EH D&D project during FY 1998 and ending in FY 1999, with that activity being transferred to the FCP initiative. The FCP initiative will provide technical analysis and clarification of DOE expectations. Additionally, the FCP is intended to support the transition to differing regulatory requirements and interpretations should DOE proceed with external regulation of these activities. Technical assistance is expected to be in the form of coordination between external regulators, regulatory analysis of site-specific requirements, workshops/meetings with DOE line and field representatives to ensure both efficiency and consistency with the process of assisting on specific closure requirements and regulatory interpretations. This effort supports the following commitment made in the Performance Agreement between the Secretary of Energy and the Assistant Secretary for ES&H: Ensure the safety and health of the DOE workforce and members of the public, and the protection of the environment in all Departmental activities

650	300	300
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(dollars in thousands)

FY 1998	FY 1999	FY 2000
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■ The Aviation Operations Team has developed and maintains a state-of-the-art accident-prevention information system which provides real time safety information to operating field elements. In FY 1998 and FY 1999, the Team will complete the development of a system to manage operation, maintenance and fiscal information, and to produce mandated periodic reports. The development efforts and system implementation will end in FY 2000, and thereafter only system maintenance is necessary. The Team sends field inspectors to vendor sites to verify safety systems and standardization. These are continuing level-of-effort needs for FY 2000 and thereafter. This effort supports the following commitment made in the Performance Agreement between the Secretary of Energy and the Assistant Secretary for ES&H: Ensure the safety and health of the DOE workforce and members of the public, and the protection of the environment in all Departmental activities	350	350	350
■ FY 1998 was the last year in which specific funding was provided for guidance interpretation in the areas of construction safety. Beginning in FY 1999, this function has been consolidated with other specialized disciplines	300	0	0

(dollars in thousands)

FY 1998	FY 1999	FY 2000
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- Activities include two broad based areas of support: technical services and radiation protection. Ongoing technical services include the guidance and interpretations function for the areas of construction safety, electrical safety, explosive safety, industrial hygiene, fire protection, and emergency response, which have been consolidated with other specialized technical disciplines to provide overall corporate technical support to DOE line programs. These corporate services include maintenance of technical standards, participation and representation in, and support to, national consensus bodies and advisory committees that are responsible for the development of standards providing best management practices and other Federal and industry-guidelines and regulations. Radiation protection activities focus mainly on the worker radiation protection in the DOE. These activities provide: interpretations, processing of amendments, and exemptions to 10 CFR 835, updated implementation guidance and technical standards; technical assistance to DOE line management on radiation protection to facilitate efficient program implementation and to support specific initiatives such as emergency response and analysis of radiation exposures to DOE workers. Overall reductions are minimal due to transfer of some work on the privatization initiative under external regulation. This effort supports the following commitment made in the Performance Agreement between the Secretary of Energy and the Assistant Secretary for ES&H: Ensure the safety and health of the DOE workforce and members of the public, and the protection of the environment in all Departmental activities

1,200	1,200	1,200
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(dollars in thousands)

FY 1998	FY 1999	FY 2000
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■ Activities will focus on implementing site chemical safety management programs that are consistent and in alignment with the Department's Integrated Safety Management Systems (ISMS), in order to promote safe management of chemical hazards consistent with other hazards management programs supported by ISMS. For FY 1999, the chemical safety program will conclude the chemical safety practice upgrade initiative. This program is now at level-of-effort status and supports the following commitment made in the Performance Agreement between the Secretary of Energy and the Assistant Secretary for ES&H: Ensure the safety and health of the DOE workforce and members of the public, and the protection of the environment in all Departmental activities	400	500	500
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(dollars in thousands)

FY 1998	FY 1999	FY 2000
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■ This ongoing level of effort program consists of two parts: one is the DOE Laboratory Accreditation Program (DOELAP) and the Radiobioassay and Bioassay Accreditation Programs. The daily operation of the DOELAP includes irradiating dosimeters and mailing them to facilities, production of calibration phantoms, preparation and processing of artificial urine and fecal samples, record maintenance, data collection and report generation. DOELAP accreditation is essential to demonstrate to workers that their radiation exposures are being measured accurately. The DOELAP implements accreditation programs for whole body dosimetry programs, external dosimetry programs (wrist badges and finger rings) and radiobioassay laboratories. The Radiobioassay Accreditation Program and Extremity Dosimetry Accreditation Program implements recent national consensus standards and addresses quality assurance issues raised at sites across the DOE complex. A comprehensive and validated internal dosimetry package will be provided to all DOE facilities for the calculation of internal radiation exposures to workers. Finally, for radiation environments outside the scope of DOELAP (high energy neutrons at accelerator facilities and dose measurements associated with criticality accidents), intercomparison programs will be routinely modeled to identify quality issues and ensure consistency. This effort supports the following commitment made in the Performance Agreement between the Secretary of Energy and the Assistant Secretary for ES&H: Ensure the safety and health of the DOE workforce and members of the public, and the protection of the environment in all Departmental activities	2,400	2,200	2,200
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(dollars in thousands)

FY 1998	FY 1999	FY 2000
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■ The Voluntary Protection Program (VPP) is modelled after private industry's program and is designed to encourage DOE sites to achieve excellence in their safety and health programs. DOE staff arrange a "benchmarking" partnership between a DOE site and a commercial site that already has OSHA VPP Star status. The DOE site can then benchmark its relative standing to the Star site and learn the proven programs and processes developed and tested by the commercial partner, thus transferring what can be utilized to the DOE site. DOE has an established set of criteria which aspiring VPP participants must meet. Once DOE-Star status is achieved, participating sites are re-evaluated on pre-determined schedules to assure continued adherence to program criteria. In addition to the brokering of partnerships for learning, DOE-VPP staff evaluate and process the VPP applications, select and lead onsite review teams, evaluate applicants with onsite review teams, and maintains customer representative and outreach programs for networking. Outreach program assistance is expected to increase with additional sites entering the program. Four additional sites are anticipated for FY 2000. Funding is based on history of costs on receiving, processing, review, and approval of a VPP application. This effort supports the following commitment made in the Performance Agreement between the Secretary of Energy and the Assistant Secretary for ES&H: Ensure the safety and health of the DOE workforce and members of the public, and the protection of the environment in all Departmental activities	500	500	500
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(dollars in thousands)

	FY 1998	FY 1999	FY 2000
■ The Federal Employee Occupational Safety and Health (FEOSH) program covers approximately 14,000 Federal employees in DOE. The FEOSH program is an ongoing, prevention-oriented program. It provides expertise and tools to DOE line managers and field elements for developing and implementing site-specific safety and health programs for their Federal employees. This effort supports the following commitment made in the Performance Agreement between the Secretary of Energy and the Assistant Secretary for ES&H: Ensure the safety and health of the DOE workforce and members of the public, and the protection of the environment in all Departmental activities.	200	200	200
■ Specific budgeting for Enhanced Work Planning is concluded in FY 1999 because it has been adopted at virtually all DOE sites	1,700	300	0
■ This transactional interface activity with the Defense Nuclear Facilities Safety Board (DNFSB) covers the work associated with response to DNFSB recommendations and Technical Positions, both of which require DOE responses and actions. With DNFSB Recommendation 95-2, "Integrated Safety Management Systems," a complex process was developed to respond to the Recommendation. This activity supports and sustains the Secretary's commitment and challenge for accelerated ongoing implementation of the Departmental ISMS. The liaison effort to provide the DNFSB interface with ISMS program management began in FY 1999 and will carry on into FY 2000. At this time innovative approaches also will be deployed across the DOE complex to "jump start" and accelerate tailored approaches to ISM. This effort supports the following commitment made in the Performance Agreement between the Secretary of Energy and the Assistant Secretary for ES&H: Ensure the safety and health of the DOE workforce and members of the public, and the protection of the environment in all Departmental activities.	400	300	1,100

(dollars in thousands)

FY 1998	FY 1999	FY 2000
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- External regulation transition support involves interactions with all Federal external regulatory agencies. It was begun in late FY 1997 and proceeded through FY 1998 to define the scope of issues involved in transfer of jurisdiction from self-regulation to external regulation. Efforts were focused on four areas: the first included broad scope policy, broad fundamental organizational and structural changes needed to facilitate and expedite transition of jurisdiction to external regulators; the second was the matching of external regulator's existing set of regulations and policies through pilots, reviews, evaluations, and discussions among the various staff; the third area was the development of guidance and orientation vehicles for use by field office/element and contractor personnel, and line program elements; and the fourth area is the development of a guidance and orientation mechanism for DOE field office/element and contractor personnel to ensure support to field and line program elements. EH has taken the initiative to set up a Corporate Safety function to facilitate transition of safety and health from internal regulation to that of licensing and regulation of safety and health to external regulating. Possibly a few single-purpose Science laboratories will be transitioned to external regulation in FY 2000. This effort supports the following commitment made in the Performance Agreement between the Secretary of Energy and the Assistant Secretary for ES&H: Ensure the safety and health of the DOE workforce and members of the public, and the protection of the environment in all Departmental activities
- Specific funding for Self-Assessment projects is concluded in FY 1999 and the project will be conducted by EH staff in FY 2000

1,400	800	1,200
0	100	0

(dollars in thousands)

FY 1998	FY 1999	FY 2000
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- Chronic beryllium disease (CBD) is one of the very serious health problems resulting from working at DOE defense production and National Laboratory sites where beryllium was used. Numbers of former DOE beryllium workers have become immunologically sensitized, and others have progressed to a diagnosed disease. This activity supports a Secretariaily-mandated policy development and execution of a disease prevention and exposure control program whose objective is to define operational safety parameters, establish improved medical surveillance programs, and facilitate information exchange for prevention of chronic beryllium disease. Activities will include program collaborative assistance, reviews and evaluations, and expanded health surveillance. This activity reflects the development of the Final Chronic Beryllium Disease Prevention Program rule. The final efforts for this rule development are funded in the EH Defense (Other Defense Activities) appropriation where the chronic beryllium disease program efforts are funded. This effort supports the following commitment made in the Performance Agreement between the Assistant Secretary for ES&H: Ensure the safety and health of the DOE workforce and members of the public, and the protection of the environment in all Departmental activities.

0	800	0
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(dollars in thousands)

FY 1998	FY 1999	FY 2000
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- Review environmental documents to verify the adequacy and validity of environmental technical information and to support implementation of streamlined and improved authorizations. Key reviews include several disposal site authorizations for DOE's low-level waste sites, and authorized limit documents for ten DOE activities. The disposal site authorizations are required for radioactive waste management, and the authorized limits result in more cost-effective and protective management of radioactive materials. Participation in these reviews is critical to the goals of improved cost-effective implementation procedure and ensuring environmental compliance. These reviews also identify needed updates to policy, guidance and program implementation tools that are needed by the field to effect program goals. Although these funds may not allow for the accomplishment of all requested reviews, they are estimated to address critical needs such as authorization reviews and analysis of annual environmental data to achieve the goals and basic performance metrics. This activity supports Strategy 1 of EH's Performance Agreement currently in effect: "Integrate and embed sound environment, safety and health management practices into the performance of DOE's day-to-day work" of the following performance objective: "Ensure the safety and health of the DOE workforce and members of the public, and the protection of the environment..."

305 50 50

(dollars in thousands)

FY 1998	FY 1999	FY 2000
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■ Provide environmental policy advice and interpretations on DOE's rule on radiation standards and associated directives to protect the public and the environment. This activity is essential to effective and consistent implementation of requirements, and appropriate use of radiation protection tools. It increases DOE-wide awareness of lessons learned, and avoids repeated and costly failures while capitalizing on success. Funding allocations are based on prior experience. Performance will be measured by the correctness and usefulness of advice given. In addition to the critical health and safety issues related to this activity (increases in radionuclide releases and doses), poor performance in this area could result in weakened DOE credibility with the public. This activity supports Strategy 1 of EH's Performance Agreement currently in effect: "Integrate and embed sound environment, safety and health management practices into the performance of DOE's day-to-day work" of the following performance objective: "Ensure the safety and health of the DOE workforce and members of the public, and the protection of the environment in all Departmental activities"	143	50	50
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(dollars in thousands)

FY 1998	FY 1999	FY 2000
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- Maintain up-to-date DOE-wide policy, directives and regulations for radiation protection of the public and general environmental protection. Activities include issuing rule radiation protection guidance and standards and associated directives, and updating of general DOE environmental protection policies and requirements including the Environmental Protection Order. Implementing 10 CFR Part 834, "Radiation Protection of the Public and Environment," is essential to DOE's public and environmental protection goals. It is necessary to ensure continued and improved safe operations at DOE facilities in a manner that is flexible and cost-effective. The environmental protection directives and policies included in this activity are intended to maintain within DOE an integrated systems approach for environmental protection that improves performance and reduces cost. Funding levels are based on experience from previous years and are prioritized based on an assumed funding level. Performance will be measured by the effectiveness of the improvements in policies and directives, and by the specific metric of resolving issues relating to EPA comments on Propose 10 CFR Part 834.

125 100 100

(dollars in thousands)

FY 1998	FY 1999	FY 2000
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■ Provide environmental guidance, instruction and tools (e.g., regulatory bulletins, information briefs, models/codes, technical standards, management guides) to assist programs in understanding and implementing newly promulgated environmental requirements in the following areas: Clean Air Act, Clean Water and Safe Drinking Water Acts, Emergency Planning and Community Right-to-Know Act, Atomic Energy Act, cultural and natural resources management acts and hazardous substance release response, waste management and pollution prevention acts. Through its work with emerging environmental regulations and Federal regulators, the Office of Environment has developed a firm understanding of regulatory requirements and an extensive working knowledge of how they affect the DOE complex and, to a certain degree, the energy section, as well as other government entities. This expertise is utilized to develop Departmental policies and guidance to assure DOE-wide understanding of newly promulgated environmental requirements, and respond to requests from DOE line management for assistance in developing cost-effective compliance strategies for new environmental regulations. These products and services help the Department meet its core value of protecting human health and the environment through the development of result oriented, cost-effective solutions. Performance will be measured by the level of success in fulfilling the commitments to improve the efficiency and effectiveness of DOE's ES&H activities articulated in the annual Performance Agreements between the Secretary of Energy and EH. This activity supports the "environment policy" component of Strategy 1 contained in the Performance Agreement currently in effect	1,660	1,200	1,200
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(dollars in thousands)

	FY 1998	FY 1999	FY 2000
■ Monitor over 200 emerging environmental rulemakings annually, and develop and represent DOE's position on proposed regulations, directives and standards to ensure DOE's concerns are considered. Although EH's efforts focus on DOE research, development and production activity and facility needs, energy sector, as well as other Federal agency needs are frequently considered. The feedback provided to other agencies and institutions resulting from this effort promotes cost-effective, implementable regulations and standards while still ensuring protection of the public, environment and workers. It also provides feedback from field organizations to ensure that the practical aspects of proposed regulations are considered in their development. Funding levels are based on past experience, projected Federal and international regulations, directives and standards development schedules giving due consideration to anticipated legislative actions and administrative reforms. Performance will be measured by the level of success in fulfilling the commitments to improve the efficiency and effectiveness of DOE ES&H activities articulated in the annual Performance Agreements between the Secretary of Energy and EH. This activity supports the "environmental policy" component of the Strategy under the corporate management objective of the Performance Agreement currently in effect	880	808	808
Total, Technical Assistance	21,444	16,445	16,445

Explanation of Funding Changes from FY 1999 to FY 2000

FY 2000 vs. FY 1999 (\$000)

Enhanced Work Planning

- | | |
|---|------|
| ■ Completion of the Enhanced Work Planning (EWP) in FY 1999 | -300 |
|---|------|

Integrated Safety Management

- | | |
|---|------|
| ■ Support Secretarial initiative and Defense Board Recommendation to improve safety management across the DOE | +800 |
|---|------|

External Regulation

- | | |
|--|------|
| ■ Support transition to External Regulation with policy and guidance development for implementation of project | +400 |
|--|------|

Self-Assessment Projects

- | | |
|--|------|
| ■ Conclude Self-Assessment projects in FY 1999. | -100 |
|--|------|

Chronic Beryllium Disease

- | | |
|---|------|
| ■ Beryllium transferred to the Other Defense Activities Appropriation | -800 |
|---|------|

Total Funding Change, Technical Assistance	<u>0</u>
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National Environmental Policy Act

Mission Supporting Goals and Objectives

The National Environmental Policy Act (NEPA) program supports the implementation of the Department's proposed activities by providing the technical leadership and support needed to assure compliance with the National Environmental Policy Act and related environmental review requirements. The goal of the NEPA program is to foster sound departmental planning and decision-making and to build public trust through effective process implementation. NEPA program objectives include: (1) ensuring the timely and adequate completion of NEPA reviews through technical assistance, independent policy review, and approval recommendations for major programmatic environmental impact statements (EISs) site-wide and other EISs, and related NEPA documents; (2) ensuring the consistency and quality of NEPA documents and increasing the efficiency of NEPA personnel by determining and responding to customer needs; (3) issuing guidance on selected technical and policy topics; (4) conducting workshops for Headquarters and field NEPA personnel; and (5) participating in NEPA process improvement teams and other initiatives that foster continuing improvement of the NEPA process. Another objective is to streamline the environmental review process by issuing revised regulations and DOE Orders to reduce costs and regulatory burdens so that the process works better, costs less, and is more useful to decision makers and the public.

Significant Accomplishments

- Provide technical assistance and policy reviews and exercise quality control in the preparation of approximately 15 major environmental impact statements. (FY98: \$2,000; FY99: \$2,000 FY00: \$2,000)
- Continue to implement NEPA streamlining efforts, including NEPA Contract Reforms, that will save more than \$26 million over five years, and issue high priority guidance documents. (FY98: \$1,000; FY99: \$552; FY00: \$500)

Funding Schedule

(dollars in thousands)

	FY 1998	FY 1999	FY 2000	\$ Change	% Change
NEPA	3,000	2,552	2,500	-52	-2.0%
Total, NEPA	3,000	2,552	2,500	-52	-2.0%

Detailed Program Justification

(dollars in thousands)

NEPA

	FY 1998	FY 1999	FY 2000
<p>■ Provide technical assistance, policy reviews and quality control in the preparation of major programmatic environmental impact statements, site-wide and other environmental impact statements, and related documents. This activity supports the environment policy strategy: "Integrate and embed sound environment, safety and health management practices into the performance of DOE's day-to-day work," of the corporate management objective of the current Performance Agreement: "Ensure the safety and health of the DOE workforce and members of the public, and the protection of the environment in all Department activities." Funding levels were derived from historical information and assuming a continued level of effort for approximately 15 major environmental impact statement reviews. Performance will be measured by the number, quality and timeliness of technical assistance and policy reviews.</p>	2,000	2,000	2,000
<p>■ Develop guidance and policy needed to increase the efficiency of Program and Field Office NEPA personnel and continue the regulatory development process to reduce costs and regulatory burdens so that the NEPA process works better, costs less, and is more useful to decision makers and the public. This activity supports the environment policy strategy of the corporate management objective of the current Performance Agreement. Funding levels were derived based on historical information assuming a continued level of effort for the regulatory development process and for issuance of high priority guidance or policy documents. Performance will be measured by the number and quality of guidance products issued.</p>	1,000	552	500
Total, NEPA	3,000	2,552	2,500

Explanation of Funding Changes from FY 1999 to FY 2000

FY 2000 vs. FY 1999 (\$000)

NEPA

■ Streamline NEPA guidance and policy development, issue high priority guidance on policy documents	-52
Total Funding Change, NEPA	-52

Management and Administration

Mission Supporting Goals and Objectives

Management and Administration within the Office of Environment, Safety and Health (EH) consists of the following activities:

Information Management provides for the overall management of environment, safety, and health data and information for the DOE complex and other stakeholders. The office seeks to identify and facilitate access to data and information required for the successful conduct of the Department's environment, safety and health programs and activities by maintaining and integrating resources to provide for the reporting, tracking, trending, analysis, and dissemination of environment, safety, and health information and data.

EH Information Management provides life-cycle management of environment, safety, and health data and information. Through the ES&H Technical Information Services, the office provides for the reporting, analysis, tracking and dissemination of data throughout the DOE complex and to its stakeholders. Technical Information Services include the operation and maintenance of the Department's reporting systems for occurrence, radiation exposure, accident, safety performance and management, and medical and epidemiology information. Through the Worldwide Web, the Technical Information Services provides access to information in the areas of Oversight, Worker Health and Safety, Environmental Policy and Assistance, Occupational Medicine, Medical Surveillance, Epidemiology, International Health, Lessons Learned, Integrated Safety Management, and Enforcement. Through its Technical Information Services, Information Management supports the Department's Strategic Goal of demonstrating organizational excellence in its environment, safety and health practices, in its communication and trust efforts, and its corporate management systems and approaches, as well as the Department's commitments to: (1) ensure the safety and health of the DOE workforce and the public, and the protection of the environment in all Departmental activities; (2) as a good neighbor and public partner, continually work with customers and stakeholders in an open, frank, and constructive manner; and (3) use efficient and effective corporate management systems and approaches to guide decisionmaking, streamline and improve operations, align resources and reduce costs, improve the delivery of products and services, and evaluate performance. The Office also maintains an information infrastructure necessary for implementing the EH mission.

In accomplishing its mission, the Office of Information Management relies on outsourcing of information management technologies including network operations, developing applications, maintaining and supporting systems, and technology transfer. Outsourcing provides access to hard-to-find skills and new rapidly evolving technologies and helps ensure that critical skills are available for short-term projects. It provides a mechanism to ensure that budgets and schedules can be met in a highly technological environment, and that resources are applied consistent with best industry practices for level-of-effort requirements. Outsourcing also allows management to focus on its primary objectives—customer service and cost management—in an environment of declining budgets and reductions in Federal staffs. Through outsourcing, successful implementation of the Department's Strategic Alignment Initiatives, and applying the General Accounting Office's guidance for improving mission performance through strategic information management and technology, the Office has reduced its budget by more than 55 percent since FY 1994. At the same time, the level of customer service, as measured by metrics such as customer access and services provided, has increased every year.

Based on the efficiencies and reductions achieved between FY 1994 and FY 1997, and operational experience during FY 1998, the FY 2000 Budget estimate supports the level-of-effort required to follow best practices in the operation and maintenance of quality Technical Information Services in support of the Department's environment, safety and health missions.

Management Planning efforts are focused on enhancing the Department's business systems for planning and execution of environment, safety and health activities and functions, as well as ensuring the contracts provide an effective mechanism for managing environment, safety and health activities at all Departmental sites. The focus of Management Planning directly supports the Department's goal of clearly identifying and funding environment, safety and health priorities and ensuring that resources are appropriately spent on those priorities. Specific objectives include: (1) ensure all Departmental sites conduct sufficient work-scope planning and identify and fund environment, safety and health priorities in the FY 1999 budget and annually thereafter; and (2) monitor annually and report on environment, safety and health expenditures (commitments) and improve related internal controls.

Technical Training and Professional Development provides fellowships and grants to further industrial hygiene and health physics disciplines to provide a future employment pool for all of DOE.

Significant Accomplishments

Information Management

- Manages environment, safety and health data and information by integrating information technologies to support environment, safety and health reporting, tracking, and trending systems, and operating and maintaining information management systems and infrastructure to support the Department's Occurrence Reporting and Processing System, Radiation Exposure Monitoring System, Computerized Accident/Incident Reporting System, Performance Indicator Data System, Non-Compliance Tracking System, Safety Issue Management System, the ES&H Management Plan System, and other databases required for the environment, safety and health programs throughout the complex.
 - ▶ This activity supports the Department's Strategic Goal: The Department of Energy will strive to demonstrate organizational excellence in its environment, safety and health practices, in its communication and trust efforts, and in its corporate management systems and approaches: (1) "Ensure the safety and health of the DOE workforce and members of the public, and the protection of the environment in all Departmental activities;" (2) "As a good neighbor and public partner, continually work with customers and stakeholders in an open, frank, and constructive manner;" (3) "Use efficient and effective corporate management systems and approaches to guide decision making, streamline and improve operations, align resources and reduce costs, improve the delivery of products and services, and evaluate performance." (FY98: \$4,807; FY99: \$4,757; FY00: \$4,757)
- Applies Web-based technologies and communications services available through EH's Technical Information Services to make information more rapidly and reliably available to the environment, safety and health community and other stakeholders by providing awareness of and access to information and services that support the Department's National Environmental Policy Act program, Oversight, Lessons-Learned, Fire Protection, Radiation and Chemical Safety,

Worker Health and Safety, International Health, Enforcement, Voluntary Protection, Medical, Vulnerability Assessment, and Integrated Safety Management programs.

- ▶ This activity supports the Department's Strategic Goal: The Department of Energy will strive to demonstrate organizational excellence in its environment, safety and health practices, in its communication and trust efforts, and in its corporate management systems and approaches: (1) "Ensure the safety and health of the DOE workforce and members of the public, and the protection of the environment in all Departmental activities;" (2) "As a good neighbor and public partner, continually work with customers and stakeholders in an open, frank, and constructive manner;" (3) "Use efficient and effective corporate management systems and approaches to guide decision making, streamline and improve operations, align resources and reduce costs, improve the delivery of products and services, and evaluate performance." (FY98: \$4,493; FY99: \$3,843; FY00: \$3,843)

Management Planning

- On an annual basis, utilizes a risk-based prioritization approach to the review of line program environment, safety and health budgets and continue to ensure that all risk-significant environment, safety and health issues are adequately addressed in the Department's budget. This is possible due to the earlier successful institutionalization and integration of environment, safety and health risk-management activities within Headquarters line program and site processes. Management Planning efforts include providing guidance to Secretarial and field offices regarding the identification and budgeting for environment, safety and health activities. In addition, as part of the Departmental corporate budget discussions, Management Planning identifies and advises the Program Secretarial Officers and the Chief Financial Officer of any major environment, safety and health vulnerabilities present in the budget request. (FY98: \$1,400; FY99: \$800; FY00: \$800)
- Develops the Department-wide environment, safety and health planning process from planning and budgeting to program execution and tracking for improved contractor accountability and performance. All Departmental sites were required to modify their contracts by December 31, 1997, to include the new DOE Acquisition Regulation (DEAR) Clause 970.5204-2, Integration of Environment, Safety and Health into Work Planning and Execution. Information on environment, safety and health commitments for execution year and progress made in meeting them is submitted by all Departmental sites during the annual budget submission. It is anticipated that the new Conditional Payment of Fee clause, which will strengthen the ability of the Department to promote appropriate ES&H performance, will be submitted for rulemaking in late 1998. (FY98: \$2,600; FY99: \$700; FY00: \$700)

Technical Training and Professional Development

- Support ongoing grants, fellowships already awarded, and existing training programs at colleges and universities to ensure the education and development of the future DOE technical workforce. (FY98: \$3,400; FY99: \$2,503; FY00: \$2,307)
- Continue to manage the planning, development, and administration of mandatory, technical, and professional development training for all EH staff. (FY98: \$1,356; FY99: \$400; FY00: \$400)

Funding Schedule

(dollars in thousands)

	FY 1998	FY 1999	FY 2000	\$ Change	% Change
Information Management	9,300	8,600	8,600	0	0.0%
Management Planning	4,000	1,500	1,500	0	0.0%
Technical Training & Professional Development	4,756	2,903	2,707	-196	-6.8%
Subtotal, Management and Administration	18,056	13,003	12,807	-196	-1.5%
General reduction	-782	0	0	0	0.0%
Total, Management and Administration	17,274	13,003	12,807	-196	-1.5%

Detailed Program Justification

(dollars in thousands)

FY 1998	FY 1999	FY 2000
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Information Management

- FY 2000 performance success will be measured by increased usage of ES&H Technical Information Services through the Worldwide Web, a greater availability, scope and content of ES&H Technical Information Services, and a greater volume of ES&H data routinely reported electronically through Internet technology. ES&H community and other stakeholders have more reliable access to relevant data through Internet technology. Continue the management of environment, safety and health data and information by:

- ▶ Operating and maintaining information management systems and infrastructure to support the Department's Occurrence Reporting and Processing System, Radiation Exposure Monitoring System, Computerized Accident/Incident Reporting System, Performance Indicator Data System, Non-Compliance Tracking System, Safety Issue Management System, the ES&H Management Plan System, and other databases required for the ES&H programs throughout the complex.
- ▶ Integrating information technologies to support ES&H reporting, tracking, and trending systems

	4,807	4,757	4,757
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(dollars in thousands)

	FY 1998	FY 1999	FY 2000
■ Continue to apply Web-based technologies and communications services available through the ES&H Technical Information Services to make information more rapidly and reliably available to the ES&H community and other stakeholders. Promote awareness of, and provide access to, information and services that support the Department's National Environmental Policy Act, Oversight, Lessons-Learned, Fire, and Radiation and Chemical Safety, Worker Health & Safety, International Health Studies, Enforcement, Voluntary Protection, Medical, Vulnerability Assessment and Integrated Safety Management programs. Since the development of the overall EH technical information system, the data collection efforts are streamlined in FY 1999 and FY 2000	4,493	3,843	3,843
Total, Information Management	9,300	8,600	8,600

Management Planning

(dollars in thousands)

FY 1998	FY 1999	FY 2000
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- Continue efforts to interface with key DOE sites in formulating sites' proposed ES&H programs and plans, conduct executive-level analysis of program cluster ES&H resource review (e.g., EM, DP, NE, ER) and program requests. The key focus is to improve the linkage between work and budget planning decisions to actual work execution, commitments and performance expectations. Specific activities that require contractor assistance include interfacing with key DOE sites (e.g., OR, RL, RF, ID) line programs efforts to ensure that proposed ES&H plans effectively address the inherent risks associated with the sites operations; assisting with the preparation of a corporate analysis of proposed line program ES&H plans and resources; and assisting in coordinating a response to external reporting requirements (e.g., Defense Nuclear Facilities Safety Board, Environmental Protection Agency) related to such Departmental issues as ES&H plans, resources, and compliance liabilities. Continue Departmental performance against its commitments under the Government Performance Results Act. Funding estimates are based on a labor hour estimate of the proposed work. This work directly supports the environment, safety and health strategy: "Ensuring DOE programs appropriately address ES&H priorities," of the corporate management objective of the current Performance Agreement. EH has collected the budget information for several years. Each year the data collection and review becomes more efficient. The sites' data is more readily accessible and useable, therefore the data collection and review expenses will decrease

1,400	800	800
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(dollars in thousands)

FY 1998	FY 1999	FY 2000
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- The key focus of the ES&H management plan effort is to ensure ES&H is an integral and visible element of work planning and work execution, ensure ES&H performance expectations and commitments are built into the programmatic (mission) and site-wide project milestones and priorities, and ensure commitment tracking and accountability mechanisms exist that clearly link work planning and commitments to actual work execution, performance monitoring (feedback), and financial incentives/rewards. The objective of this task is to provide corporate interface to improve the coupling between work and budget planning decisions to actual work execution commitments and performance expectations. Specific activities include working with key DOE operations offices with effective ES&H work and budget planning processes to enable the development of a mature commitment tracking system that enables line management monitoring and measuring of progress toward important ES&H commitments. Funding estimates are based on a labor hour estimate of the proposed work. This work directly supports the environment, safety and health strategy: "Ensuring DOE programs appropriately address ES&H priorities," of the corporate management objective of the current

Performance Agreement	2,600	700	700
Total, Management Planning	4,000	1,500	1,500

(dollars in thousands)

FY 1998	FY 1999	FY 2000
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Technical Training and Professional Development

■ Support ongoing grants, fellowships already awarded, and existing training programs at colleges and universities to ensure the education and availability of a future DOE technical workforce and to provide technical information which is beneficial to DOE and EH programs. FY 2000 performance will be measured by the quality and number of students that complete the Industrial Hygiene and Applied Health Physics fellowship programs.	3,400	2,503	2,307
■ Retain instructional support for the development of training activities. Conduct self assessments, as required by DOE training policy, to ensure that the EH training program is being implemented effectively and efficiently; and technical support needed for administering and upgrading the ES&H automated training management systems and databases is being maintained. Automated systems support the registration of training activities and process and store EH training data. These systems assure the accurate documentation and certification of the technical competence of the EH workforce and support grants, fellowships, and training programs at colleges and universities that enhance the recruitment of qualified graduates of critical disciplines and the development of the future DOE workforce. Also, support to Departmental training efforts is provided. The implementation of automated training systems in FY 1999 are expected to reduce support expenditures in FY 2000.	1,356	400	400
Total, Technical Training and Professional Development	4,756	2,903	2,707
Subtotal, Management and Administration	18,056	13,003	12,807
General Reduction	-782	0	0
Total, Management and Administration	17,274	13,003	12,807

Explanation of Funding Changes from FY 1999 to FY 2000

FY 2000 vs. FY 1999 (\$000)

Training

■ Training for Federal staff was transferred to Program Direction. The overall funding reduction for Technical Training & Professional Development is the result of initial downsizing of the fellowships and grants program and no new initiatives	-196
Total Funding Change, Management and Administration	-196

Environment, Safety and Health - Energy Supply

Program Direction

Mission Supporting Goals and Objectives

Program Direction in this account provides overall direction and support for Environment, Safety and Health (EH) Energy Supply programs to ensure that all operations are conducted in the most efficient and effective manner.

Program Direction in this account has been grouped into four categories:

Salaries and Benefits provide funding for a Federal staff (FY98: 175 FTE; FY99: 129 FTE; FY00: 124 FTE) who have the technical expertise to carry out the essential EH mission. The EH mission requires experts to develop overall environment, safety and health policy for DOE sites and facility operations; to provide a central and coordinated source of scarce technical expertise to all field elements; to provide a central clearing house for information, analysis and feedback regarding new efforts, present activities, and unforeseen occurrences taking place at the multitude of diverse facilities within the DOE complex; to provide the Department with independent oversight capability to perform activities relative to environment, safety and health programs across the DOE complex, and oversee the Department's health studies endeavors.

Travel includes all costs of transportation, subsistence, and incidental expenses for EH's Federal employees in accordance with Federal Travel Regulations. This also includes travel costs associated with the permanent change of duty station.

Support Services are not provided for in this decision unit, consistent with Congressional direction.

Other Related Expenses provide for the EH Working Capital Fund and training for Federal staff. The Working Capital Fund provides for non-discretionary prorated costs for items such as space utilization, computer and telephone usage, mail service, and supplies. Training includes tuition for EH Federal employees.

Significant Accomplishments

Salaries and Benefits

- Salaries and Benefits reflect the revised full-time-equivalent (FTE) split between Energy Supply and Other Defense Activities. Overall, salaries and benefits are in line with the FTEs requested and include the 4.1% Economic Assumptions provided by the Office of Management and Budget (OMB). (FY98: \$16,586; FY99: \$11,313; FY00: \$12,910)

Travel

- Overall, EH travel requirements are consistent with the overall EH Federal staff and include the 2.1% Economic Assumptions as provided by OMB. (FY98: \$1,500; FY99: \$1,500; FY00: \$416)

Support Services

- Given the unique nature of the Environmental Safety and Health Program, support services are not provided for in this decision unit.

Other Related Expenses

- This provides for the EH Working Capital Fund (administered by the Office of Management and Administration) which covers non-discretionary prorated costs such as space utilization, computer and telephone usage, mail service, supplies and electronic services and training for Federal Staff which includes tuition costs for EH Federal employees. 2.1% is included for the Economic Assumptions as provided by OMB. (FY98: \$5,464; FY99: \$5,585; FY00: \$5,672)

Funding Schedule

(dollars in thousands)

	FY 1998	FY 1999	FY 2000	\$ Change	% Change
Headquarters					
Salaries and Benefits	16,586	11,313	12,910	+1,597	+14.1%
Travel	1,500	1,500	416	-1,084	-72.3%
Other Related Expenses	5,464	5,585	5,672	+87	+1.6%
Total, Program Direction	23,550	18,398	18,998	+600	+3.3%
Full-Time-Equivalents	175	129	124		

Detailed Program Justification

(dollars in thousands)

	FY 1998	FY 1999	FY 2000
Salaries and Benefits			
<ul style="list-style-type: none"> ■ Salaries and Benefits reflect the FTE split between Energy Supply and Other Defense Activities. Overall, salaries and benefits include the Economic Assumptions provided by OMB 	16,586	11,313	12,910
Travel			
<ul style="list-style-type: none"> ■ Overall, EH travel requirements are in line with the overall EH Federal staff 	1,500	1,500	416
Other Related Expenses			
<ul style="list-style-type: none"> ■ This provides for the EH Working Capital Fund (administered by the Office of Management and Administration) which covers non-discretionary prorated costs such as space utilization, computer and telephone usage, mail service, supplies and electronic services and training for Federal staff which includes tuition costs for EH Federal employees previously budgeted in Management and Administration 	5,464	5,585	5,672
Total, Program Direction	23,550	18,398	18,998

Explanation of Funding Changes from FY 1999 to FY 2000

FY 2000 vs. FY 1999 (\$000)

Salaries and Benefits

- Requirements are increased commensurate with the allocation of Federal staff between Energy Supply and Defense programs. +1,597

Travel

- Requirements are decreased commensurate with the allocation of Federal staff between Energy Supply and Other Defense programs. -1,084

Working Capital Fund

- Total requirement decreased commensurate with the reduction in total EH FTEs and training for Federal Staff previously budgeted in Management and Administration are included in Other Related Expenses for a net increase +87

Total Funding Change, Program Direction	+600
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Other Related Expenses

(dollars in thousands)

	FY 1998	FY 1999	FY 2000	\$ Change	% Change
Training	0	0	100	+100	-----
Working Capital Fund	1,781	1,845	1,832	-13	-0.7%
Printing and Reproduction	77	80	80	0	0.0%
Rental Space	3,259	3,300	3,300	0	0.0%
Software etc.	347	360	360	0	0.0%
Total, Other Related Expenses	5,464	5,585	5,672	+87	+1.6%